





Caste, class and social mobility: a longitudinal study in a north Indian village, 1958-2015

PhD thesis

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Joint PhD program:

PhD in Economic Sociology and Labour Studies (Università degli Studi di Milano)

and

Doctorat en Sciences Economiques: Changement Social Mutations Economiques (Universitè Paris 7 Diderot)

Academic Year 2020

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Acknowledgements

This thesis would not have been possible without the collaboration of the inhabitants of Palanpur. I am profoundly grateful for the hospitality they gave to me for more than six months, without expecting anything in return. I am thankful for the multitude of *chai* and lunches they shared with me, for the long discussions we had, the many laughs and their lovely company which made my fieldwork pleasant even during hard times. The cohabitation with Munni and Rajpal and their adorable family not only allowed me to conduct my research at my best but also made me a better human. I hope I could one day reciprocate.

I am infinitely grateful to Himanshu, who gave me access to the field and the rich compilation of data and material collected on Palanpur over the years, wisely oriented my research and always supported me. Thanks to him, I could work with a very dynamic and friendly research team at the Centre of Social Sciences and Humanities (CSH) in New Delhi which became my headquarter during my visiting periods in the last years.

A special thank is also owed to my friend and field mate, Gowda Shankare, with whom I had crucial conversations during my fieldwork and even later.

I want to thank my two supervisors, Gabriele Ballarino and Isabelle Guérin, for their constant trust and support, for challenging me to deliver my best and guiding me in this long journey even when I felt lost. There are no words to say how lucky I feel that I can learn from two awesome researchers like them.

Finally, among all the brilliant scholars I had the chance to meet during my journey, I can not but address a special acknowledgement to Nazareno Panichella who managed to reconcile me with the statistical tools and contributed to the data analysis. Thanks to Prof. Hans Schadee for his invaluable help and for sharing his illimited knowledge of about almost everything. Thanks to Christophe Jalil Nordman for having inspired me and always having believed in my research and thanks to Véronique Dupont for her precious advises all over my doctoral studies. Last but not least, a special thanks to Jérôme Blanc for having encouraged me to pursue a PhD after supervising

my Master's dissertation and for being always present. Beyond the precious academic ties consolidated during the years, I above all developed friendships which profoundly changed my worldview and reinforced my willingness to become a researcher in this life. A special thought goes to my friends and colleagues of the AJEI (Association Jeunes Etudes sur l'Inde) with whom I have great memories of exciting seminars and workshops we organised together and passionating discussions about our research topics.

Thanks to Giulia, with whom ethnography has become a way of living. Thanks to Marco, to whom Palanpur became familiar, of necessity. His daily help and support were crucial for the completion of this thesis.

This achievement is to my parents, who gave me the key to freedom and happiness: the possibility to follow my aspirations.

Funding acknowledgement

This thesis has been funded by a three-years scholarship of the Italian Ministry of Education (MIUR). The fieldworks have been partly granted by the CESSMA (Centre d'études en sciences sociales sur les mondes africains, américains et asiatiques) Université Paris 7 Diderot, the Fondation Pierre Ledoux-Jeunesse Internationale, the Ecole française d'Extrême-Orient, the Académie Française-Fondation Zellidja and the Fondation Saint-Exupery.

Introduction

According to the new social mobility index compiled by the World Economic Forum (WEF) in 2020, India is ranked very low among the five countries in the world that need the most to develop favourable conditions to a society where every single person would have the same opportunity to fulfil his or her potential in life irrespective of socio-economic background. The right conditions to improve social mobility would depend on five key dimensions: health, education, technology, regular wage and quality of work, and inclusive institutions. Indeed, the technological progress, the socio-economic development, the improvement of health and education and the demographic transition led by the process of modernisation in the industrialised countries of the early 20th century have created better opportunities for social mobility. Despite the impressive economic growth rates of the past three decades with peaks at almost 9% of GDP growth in the early 2000s (World Bank, 2019), India still has a weak system of social protection, unfair wage distribution and poor working conditions. While extreme poverty level has gone down according to recent economic reports, the economic inequality has much worsened (Banerjee and Piketty 2001; Bhalla 2003; Deaton and Dreze 2002, Sen and Himanshu 2005, Pal and Ghosh 2007). The gap between the top quintile and the bottom quintile of the income distribution has doubled in India since the early 1990s, reaching one of the most extreme levels of inequality in emerging economies (OECD, 2011). The economic development in India has been steady but uneven, with economic gains and access to opportunities differing between individuals, groups of individuals and geographic areas.

The mechanisms of reproduction and reconfiguration of the inequalities in a given society can be better highlighted through the study of the social mobility or the movements between socio-economic positions or social classes: their trends, patterns and relationships with determinant factors. Indeed, social mobility is an indicator of the opportunities available and the relative advantages and disadvantages of different individuals or groups of individuals to access these opportunities. A lack of social mobility indicates a static social stratification and persisting inequalities. Therefore, social mobility

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is significant to understand the relationship between development, which implies the production of wealth, and inequality, which is the differential distribution of wealth among different strata of the population.

Since Independence of India in 1947, the country has undergone profound economic and political transformations: the abolition of the Zamindari Act in the 1950s (land reforms), the introduction of reservation quotas for historically disadvantaged castes groups, the green revolution in the 1970s, the first phase of industrialisation in the 1980s, and the neoliberal reforms in 1991 which lead to greater integration with the global economy. While the technologically advanced cities have experienced rapid service-led growth as part of the liberalisation of the economy and developed better access to health and education, rural areas are far behind in terms of economic and social development. The disparity between rural and urban areas is one of the largest contributing factors overall economic inequality in the country. Indeed, extreme poverty is concentrated at 80% in rural areas, according to the Reserve Bank of India (RBI, 2012). While there is evidence of a narrowing of the rural-urban wage gap and the education attainment gap in the last two decades, the general level of inequality remains very high. In 2011 the wage gap was 45% for workers with less than primary education (Rosenzweig and Munshi, 2016). In 2010, the rural workers possessed just 4,7 years of education, while urban workers had 8.4 years of education, implying an education gap of 78% (Hnatkovska and Lahiri, 2013). The structural transformations of the last half century in India have not compensate for the severe distress of the rural economy. The rapid population growth has created unbearable pressure on the available cultivable land per capita in a country where more than 800 million of inhabitants reside in rural areas (68% of the total population) and half of the total working population depends directly or indirectly on agriculture for their livelihood (National Sample Survey Office, NSSO, 2011). The poor human resource capabilities in rural areas, the small and predominantly informal industrial sector, the premature deindustrialisation in favour of the services, are some of the structural reasons for the rural population hardly finding any rooms to step up the wellbeing ladder.

The rural-urban wage gap is generally considered by the economists to induce migration flows, but in India, the internal migration for work, from rural areas to urban centres, appears surprisingly low compared to other large developing countries. However, the official statistics are thought to depict a figure which stands very far from reality. According to the Census of 2011, only 3.5 million migrants moved for economic reasons. Since the definition of migration used by official surveys does not cover circular, short-term and seasonal migrants who do not change their place of residence, the available estimates are considered inadequate when compared to micro-studies sug-

gesting that the total cyclical migrants in India could be nearly 100 million (Deshingkar and Akter, 2009). There are several reasons for such uprooted migrants to continuously vacate in search of job opportunities without never stabilising themselves.

First, the large informal sector, which accounts for 90% of the total non-farm employment (ILO, 2016) contributes to the spread of irregular, daily-based, forms of jobs which accommodate the fluctuation of the labour demand. These jobs absorb most of the unqualified rural population exiting agriculture, however, they are not attractive enough in terms of wage, regularity, and social protection to induce proper migration.

Second, the weak progress of the education services in rural areas make them less competitive than urban educated middle-class candidates for better positions in the formal sector.

Third, the reduction of the farm size per capita has reduced agriculture to a secondary source of livelihood. Despite the meagre economic return of agriculture, prevalently limited to self-subsistence, the attachment to the land has remained strong enough to keep partly locked to cultivation the marginal farmers. The land is not only an economic resource in rural societies but also a symbolic value acting as a social market. Consequently, the multiplication of the economic activities at the household level and the individual level, has become a widespread strategy among rural workers. Nevertheless, there is evidence of the overall inequalities in rural India increasing in the last decades (Himanshu, Lanjouw and Stern, 2018). This finding means that even in rural areas, where the opportunities of upward social mobility are fewer than in cities, some have been able to grab better opportunities than others with the economic diversification and the transition from the agrarian society based exclusively on agriculture, to a modern economy. It is not clear however if the structures of accumulation consolidated in the agrarian society and characterised by a sharp polarisation between landlords and landless agricultural labourers, continue to play a role in the widening of the inequalities.

The question of social mobility assumes even more importance in rural societies because of the historical link between the division of labour and the caste's hierarchy. One of the distinctive features of the system of caste is the inheritance of occupations: «Caste is an ascribed form of social stratification characterised by endogamy, rigid hierarchy, and status delineated by hereditary occupations, ritual purity and pollution rules» (Béteille, 1965:46). In the agrarian society, caste and class perfectly converged in a rigid social order where criteria of wealth and rituality were interlinked and reproduced from generation to generation. With the economic development and the increasing integration with the urban labour market, there are expectations of the inheritance of occupations to weaken.

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The spread of new opportunities, not associated with the caste hierarchy, should be equally accessible to all the caste groups. According to the modernisation theory, there should be a decline in the influence of ascribed attributes like the class of origin and, by extension, caste, on occupational destination with the transition to modern society. Moreover, since India's independence in 1947, various schemes of positive discrimination have been implemented to foster the social mobility of the historically disadvantaged castes and compensate for the effects of the caste's discrimination in the labour market. The reservations quotas have helped to entrench the importance of caste as a social institution for access to higher education and jobs in the administration and public sector enterprises. But they have also reinforced the caste-based segmentation of the labour market and rivalries: "workers sometimes enforce the stratification by caste to maintain their chances of entering reserved posts which are limited" (Harriss-White, 2003: 32). In the literature, there is a continuum of positions concerning the persistence of the caste inequalities in contemporary India.

Some scholars argue that with the modernisation of the economy, the caste hierarchy has weakened and the stratification by class has become more salient to understand the social inequalities. At the opposite, we find arguments for the greater wealth and faster growth worsening the gap, according to which caste would remain the most important determinants of socio-economic inequalities. Finally, some others sustain that the degree of caste inequality is unimproved, and wealth is still concentrated in the upper castes. These arguments are mostly based on studies of the inequality between castes which draw on qualitative analysis specific to a particular region and a particular period. There is only a handful of studies available on mobility within caste across time. Recently, some Indian scholars have led a few studies based on a quantitative analysis at the national level. The majority of these studies have focused upon a particular outcome variable, consumption expenditure, wages or wealth, and explored how the level of inequality of this outcome has changed over time among the population. However, little attention has been paid to social class mobility, with classes defined on the basis of occupations sharing similar market and work positions or similar social status, as in the mainstream literature of the social stratification. While much social stratification research has been and still is carried out in Western countries, this thesis is an original contribution to the emerging literature concerning social stratification and mobility in developing countries.

0.1 The research questions

This thesis aims at analysing whether, with the transition from the agrarian society to a modern economy, new opportunities of social mobility have opened up to the inhabitants of Palanpur, irrespective of their social origin which is, class and *jati* membership.

The first research theme (I) concerns the movements from the fathers' class (i.e. social origins) to the sons' class (i.e. social destinations) and the relative influence of the social origins on the chances of experiencing different patterns of social mobility. More specifically, we intend to answer the following questions:

I.A How much total mobility has been in the society, and what are the prevailing patterns of mobility?

Different patterns of mobility can imply an upgrade or a downgrade of the social position in a hierarchical dimension of the social stratification, or a class movement without any improvement of the social position.

I.B What are the relative mobility chances of individuals having different social origins? How much the opportunities for mobility differ across classes?

The social fluidity, or the relative mobility chances, indicates the degree of inequality of opportunity to experience social mobility in a society. A society with a low social fluidity, is a society where the access to opportunities for social mobility is highly unequal and the social background continues to heavily influence the life chances of different individuals and groups of individuals.

I.C How is the direct influence of the social origins on the social destinations mediated by other factors, such as education and *jati* (i.e. sub-caste)?

Beyond the origins-destinations association, other individuals and house-holds' characteristics are postulated to increase or decrease the chances of experiencing social mobility. Among these factors, we focus in particular on the role of education and *jati*.

We answer to these three questions in a time-varying perspective involving important political and economic changes of the rural society. Indeed, we are interested in understanding whether the total social mobility has increased over time, the patterns of mobility have changed, and the society has become 20 INTRODUCTION

more fluid. We estimate the trends and patterns of intergenerational mobility from the land reforms in the 1950s to the green revolution in the 1960s-1970s, the industrialisation in the 1980s-1990s and the liberalisation of the Indian economy since the 1990s onward.

The second research theme (II) concerns the association between the jati and the class over time. We ask the following questions:

- II.A Is the congruence between occupation and *jati* reproduced in the changing structure of opportunities? Has there been a decline of the influence of *jati* on the class of destination irrespective of the social origin?
- II.B Are certain *jati* groups disadvantaged from the opportunity of being upwardly mobile? Are the opportunities for social mobility different for different *jatis*?

0.2 The theoretical framework: modernisation and social mobility

This thesis engaged theoretically with the framework of the modernisation theory (Treiman, 1970), which identifies the mechanisms through which the chances of social mobility equalized in modern societies. Indeed, the studies of the social mobility in the West emerged with the aim to test the modernisation theory by measuring the direct influence of the social origin on the social destination of an individual through the study of the intergenerational mobility. The processes of modernization of the society include the mechanization and the industrialisation of the economy, the educational expansion, the increased connectivity with mass transportation, urbanisation, and spatial mobility. In preindustrial economies, there was a strong association between land and social status and economies of scale were organized along familial or kinship lines.

According to Treiman (1970), the technological progress and the industrialisation would have two main effects on the occupational structure. First, the mechanisation would improve the agricultural productivity and as a consequence, the demand of agricultural labourers would decrease. Second, with the technological progress, the increase in scale and complexity of the industrial production, the number of clerical and administrative occupations would grow faster. Moreover, the direct influence of the family resources on the individual's life chances is expected to decrease with industrialisation because the shifts in the demand for labour would create alternatives to the father's

occupation. Hence the direct inheritance of the occupation would decrease because new occupations arise which were not available before. The influence of the social origins would also decrease because among industrial workers the need for child labour for the economy of scale at the household level would become less pressing. Consequently, the level of education would increase and the access to education would improve because of higher demand of qualified workers. With the improvement of the spatial connectivity, growing possibilities for geographic mobility would lessen the influence of kinship-based norms and values on occupational choices. Moreover, in cities it would also be more difficult for employers to discriminate candidates on the basis of the social origins, as information about their social backgrounds would be hardly available. Therefore, the selection processes would follow meritocratic principles rather than the stigma associated with the family background and the individual qualifications, more than the family resources, would determine school success and occupational achievement in modern societies (Parsons 1951).

All these processes would lead to a reduction of the effect of the social origins on inequality in class destinations of sons. In other words, the modernisation hypothesis predicts that with the transition from a pre-industrial societies to a modern society there would be a shift from ascription towards achievement (Blau and Duncan 1967) and the impact of the family resources on the educational attainment and the occupational status would weaken. By extension and given the historical link between caste and occupation specific to the pre-industrial societies in India, we expect the effect of caste on the occupational outcome to decrease with the diversification of the economic activities and the integration with the outside labour markets. However, the research on intergenerational social mobility in India, which is concerned with the extent to which the class of the present generation depend upon the characteristics of the previous generation, is limited due to the scarcity of longitudinal data. Moreover, the evolution of the caste-class association over time requires detailed information on each individuals *jati* (sub-caste), but such information is not available on a large scale.

In this thesis, we measure the social mobility of the individuals within a 7-class schema based on the standard EGP classification (Erikson, Goldthorpe and Portocarero, 1979) and adapted to the idiosyncrasies of the local context. Most of the research previously done on rural class formation and class relations in rural India relies on Marxist class schemas based on structures of accumulation and property ownerships. These studies generally engage with the Marxist framework to explain the influence of the agrarian social structures on the reproduction of socio-economic inequalities in the capitalist era. The Marxist's class analysis insists on the relationships of exploitation and

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domination that would be determined by the concentration of power among certain groups. These groups would activate their power to the detriment of others by means of coercion and exclusion. While there is evidence of the power relations continuing to shape the rural social space, it is not clear whether they still depend on different levels of control over the means of production (i.e. landownership) or on residual forms of caste domination.

This thesis argues that the conceptualization of class should be distinguished from caste in order to unravel the relation between the two with the changing structure of opportunities and to analyses the respective influence of the two on the opportunities of social mobility and the reconfiguration of the social hierarchies. For these reasons, we consider the life chances approach to the definition of class as being more comprehensive of the social distinction within the labour market and to better suits the analysis of the caste-class association. We adopt the neo-Weberian concept of class corresponding to a combination of occupational categories whose members would appear to be comparable in terms of sources and level of income, degree of economic security and chances of economic advancement, skills and qualification level, relations of authority and control governing the process of production, and the degree of autonomy in performing the work-tasks. Indeed, the approach to the class relations in a polarized structure creates problems of class location for transitional and intermediate positions arising with the diversification of the economy. Rather than exploitation and control over the mean of production, different occupational groups associated with similar labour market situations would determine different life chances and therefore identify with different classes.

Moreover, according to the Weberian theoretical framework, and in contrast with the Marxist approach, we distinguish the class from the social status. The social status, defined as a collective positive or negative social estimation of honour, is differently valued within the social order and contributes to place a group above or below the others and to confer a relative amount of power. Social status, in Weber, is typically founded on the style of life, the forms of behaviours and knowledge and hereditary prestige. In practice, status expresses in society through connubium, commensality, norms, conventions and rituals. For these reasons, caste is considered by Weber the ideal-type of the social status. In the agrarian society, the caste overlapped perfectly with the class and power was concentrated among dominant castes of landowners. With the transition to a non-farm market economy, we expect the association between the caste and the class to weaken. If this hypothesis was verified, it would be of great relevance to analyse how social relations reconfigure. Does the ordering of the social status shift from the caste to the class distinction? The thesis attempts to answer this question combining

different methodologies in a unique case study.

0.3 The case study and the methodology

The thesis studies the trends, patterns and determinants of social mobility among the population of Palanpur, a village of somewhat above 1200 inhabitants located in Uttar Pradesh. The whole population of Palanpur has been surveyed seven times from 1958 to 2015, which makes this case study a unique opportunity to study intergenerational social mobility. One of the critical features of this case study is the possibility to disaggregate the caste at the *jati* level, which is considered by anthropologists the most relevant unit of analysis of the caste stratification. Indeed, due to sample size limitations and the absence of detailed information in official data, most of the studies of social mobility on a large scale do not use jati. In India, there are perhaps more than 3,000 jatis, and there is no one all-Indian system of jati ranking in order of status. Undoubtedly, the only possibility to study castes at the national level is to use the four administrative categories (i.e. Upper Caste, Other Backward Classes, Scheduled Castes and Scheduled Tribes) to proxy the jati effect. However, in the administrative classification, jatis are grouped according to similar socio-economic characteristics, which tend to overlap with the criteria of class stratification. Therefore, using these categories to study the congruence between caste and class and the mobility within caste has two consequences: the simplification but also the distortion of reality. In this thesis, we deploy both quantitative and qualitative methods. Detailed information on socio-demographic characteristics, occupation, land, income are available at the individual and household level in 1958, 1963, 1975, 1984, 1993, 2009 and 2015. Besides, drawing on six months of fieldwork in Palanpur and shorter fieldworks among migrants in Punjab, Himachal Pradesh and Haryana, we carried 102 semi-structured interviews, fully recorded and transcribed, which constitute the bulk of the qualitative analysis. We combine different data and methods following a triangulation design: the qualitative and the quantitative approaches interact at the level of the theoretical framework and the definition of the research questions as well as in the analysis of the results. First, the research questions and the broad hypothesis have been inductively defined on the basis of the survey data and the ethnographic information collected during fieldwork. Second, we theoretically framed the research questions and further clarified specific hypothesis using a deductive approach. The original and theoretically inclusive method we developed in this case study constitutes the backbone of the insightful analysis of the social mobility in Palanpur discussed in the the24 INTRODUCTION

sis. The quantitative analysis of the survey data aims at measuring trends and patterns of the association over time with standard methods of social mobility studies. The qualitative analysis of the interviews and the contextual elements collected via direct observation describe the coping strategies and decision-making processes, the subjective perceptions, the personal aspirations and the effects of stigma and reputation underlying trends and patterns of social mobility.

0.4 Outline of the thesis

The first chapter provides an account of the literature on the concepts of caste and class, the historical evolution of the caste system, the mechanisms of caste reproduction in contemporary India and the class formation in rural India. We develop the theoretical framework for the analysis of the social mobility: the foundations of the social stratification, as defined by Weber and the neo-Weberian theories. Finally, we review the recent contributions on the social mobility in India and identify the gap in the literature. In the second chapter we present the case study, the methodology and the social composition of the village: the population observed, the caste system and the household model in Palanpur.

In the third chapter we examine the structural transformations of the last half-century in India and the integration of the village economy with outside labour markets inducing significant changes at the social and economic levels. This chapter contributes to the study of the internal migration in India, bringing evidence of the emergence of commuting as the main patterns of spatial mobility for work, and its implications for the structure of opportunities.

In the second part of the thesis, we analyse whether the diversification of the economy and the integration of the working population with outside markets, have opened up new opportunities of social mobility and equalized the chances of upward mobility irrespective of the social origins and the *jati*. In the fourth chapter, we assess different criteria of social classification and define a 7-class schema. We describe the class distribution over time and analyse the income-class correspondence.

The core contribution of this thesis consists in the analysis of the trends and patterns of intergenerational mobility presented in the fifth chapter. We measure the trends of social mobility over time, absolute and relative, identify different patterns of mobility and test the effect of the social origins on the social destination over time. We also estimate the influence of other individual and household characteristics on the social destinations, in partic-

ular education and jati. The association between jati and class over time is further analysed in the sixth and last chapter.

Chapter 1

Review of the literature

1.1 Introduction

Since Sorokin launched the social mobility debate in "Social and cultural mobility" (1920), the influence of modernisation over the reconfiguration of the social structures and the emergence of new classes has been a very active domain of sociological investigation in the West.

The broad concept of social mobility refers to the transition of an individual, or a group of individuals, from a social position to another within a system of stratification in a given society (Sorokin 1959, Marshall 1998). Stratification is a term borrowed by the sociologists from the geology and means overlay of different strata. When applied to the social space, the concept of stratification refers to the unequal distribution of resources and opportunities, material and immaterial, among the members of a society (Sorokin 1959). However, social stratification is not exactly a synonym of inequality; it adds to the notion of inequality the hierarchical dimension: "(...) social stratification means the differentiation of a given population into hierarchically superposed classes" (Sorokin 1959:11). Indeed, social stratification manifests in the existence of upper and lower social layers, or strata, whose order is defined by the access to a scale of resources and opportunities hierarchized in terms of quantity (e.g. income) or quality (e.g. occupation).

The higher is the probability for any individual or group of individuals to access to a better position in the social space, irrespective of the characteristics of the family background, the more a society is equal in terms of opportunities; at the opposite, a lack of social mobility indicates higher inequality of opportunity.

The studies on social mobility aim to understand how the social origin affects the social destination of an individual and how the social origin in-

teracts with other factors increasing or decreasing the chances to attain a higher social position, for instance, education and migration. The vast sociological literature on the social stratification has provided solid evidence that the social origin, in term of class, is a determinant factor of socio-economic inequalities in all the societies.

However, social mobility is expected to increase, within a population, when significant societal changes and transformations of the economy occur and contribute to reconfiguring the structure of opportunities and the social hierarchies. The study of patterns and mechanisms of social mobility in conjunction with the processes of industrialisation and post-industrialisation has involved an entire generation of sociologists (e.g. Blau and Duncan 1967, Treiman 1970, Hauser 1982, Erikson and Goldthorpe 1992) who suggested that the rate of occupational inheritance decreases as societies industrialise. However, the increase in social mobility does not necessarily reflect a better social fluidity. The decline of people engaged in agriculture, the shift from manual to non-manual occupations and the substitution of the manufacturing sector with the increasing production of services, lead to a corresponding increase of clerical and managerial positions (Erikson and Goldthorpe 2001), mainly as a result of the structural transformations rather than real upward mobility. The Indian economy has undergone similar structural transformations in the last half-century: agriculture, which was the first sector of contribution to the gross domestic product (GDP), in the 1950s, has become the last in recent decades, as opposed to the service sector which has been growing very fast. These changes combined with the withdraw of the State from its direct involvement in the economy, the increasing privatization all over the country and, more in general, the Structural Adjustment Policies (SAP) implemented since the early 1990s, had an essential impact on the transformation of the whole society, and in particular the rural one.

One of the main effects of these structural transformations has been the expansion of the "middle-class" portion of the population (Vaid and Heath 2010, Aslany 2017), comprising mainly self-employed in the private sector and white-collars in the public sector. This portion was almost absent from the dualistic class structure of small cultivators versus large landowners of the pre-modern agrarian society, and its emergence highlighted the limits of the early Marxist conceptualisation of the peasant classes based on the control over the means of production. Neo-Weberian interpretations of classes have emerged in opposition to the Marxist framework, for the understanding of rural class formation in India.

Furthermore, the theories developed in the Western literature on social mobility and modernisation, cannot be applied straightforwardly to India, in particular for two reasons. First, most of the economic growth in India

has occurred in sectors that do not require a large labour force, contrary to what happened in the West with the industrialisation, and thus, the young generations, exiting agriculture, undergo the slowing down of employment in non-farm sectors, particularly in the organised sector. The National Commission for Enterprises in Unorganised Sector (NCEUS) defines unorganized or informal sector, in opposition to the organized or formal sector as consisting of "all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis with less than ten workers" (NCEUS, 2008).

In India, there are two major systems of stratification, by class and by caste, which contributes to a systematic ranking of the population with unequal conditions of access to resources like wealth, income, power and prestige. Caste is a multi-layered system of social differentiation involving different categories of social identity, and there is a multiplicity of ways to approach caste, conceptually and empirically. Caste has different attributes, the most important are social separation, a ranking of status and occupational specialisation (Dumont 1980), and four dimensions of manifestation: economic, biological, political and ideological (Lindt 2013).

In the agrarian society, the two systems were interlinked due to the caste division of labour rooted in the idea of a social order based on criteria of wealth and purity. However, with the emergence of new caste-free occupations and the complexification of the social space, we expect a reconfiguration of the structure of opportunities, less influenced by the caste hierarchy and a decline of the hereditary occupation.

There has been a long debate among sociologists and anthropologists over whether caste is a cultural or a structural phenomenon. In early orientalist studies (e.g. Dumont, Pocock and Marriott, Leach), caste was defined in terms of Hindu rationale, and therefore, was considered unique to India or at least to South Asia (Berreman 1968). In opposition to this idea, some scholars stress that the caste system, in terms of structural features, is fully comparable to other forms of social stratification found in other societies as well (Leach 1960, Sinha 1967, Berreman 1968, Appadurai 1988, Gould 1990). Weber has an ambiguous position on this matter: the essential starting point of his analysis of Hinduism is the identification of the caste system as the fundamental institution of Indian society; the institution that determines the character and nature of all other institution and distinguishes them from the functionally analogous institutions of other societies (Ertman, 2017). Weber says: "Caste, that is the ritual rights and duties it gives and imposes, and the position of the Brahmans, is the fundamental institution of Hinduism. Before everything else, without caste, there is no Hindu" (Weber 1958:396). Nevertheless, Weber admits that there are also castes among the Muslims of India, and, to some extent, castes are also found among Buddhists; moreover, he states that elements of the caste system are presents in many other civilisations, even in Europe and America. This contradiction leads to an inquiry into the nature of caste.

In the literature on social stratification in India, caste and class have often been considered as closely associated. In fact, one of the distinctive features of caste is the inheritance of occupation, and in the pre-modern India caste was inherent to the economic status; the division of labour and the economic relations in the village were organized along the caste hierarchy.

However, the two concepts have a significant conceptual difference: caste is an ascriptive and closed system, and individual mobility for its members it is not possible, whereas the class startification is an open system where mobility is allowed (Sharma 1984, Jayaram 1996, Béteille 1996). Moreover, with the diversification of the occupational structures and the modernisation of the rural society, the class structure has become more complex, and new professions arose which are not associated with any caste by birth.

The link between caste and class is not static and stagnant and is expected to weaken with the increasing social fluidity theorised in the literature of the social stratification of modern societies. Hence, the interaction of class and caste and its influence on "the social and economic formation" as defined by Godelier (how modes of production, of varying nature, combine and articulate in a hierarchical relationship) is under observation in a recent stream of sociological studies in India. Several scholars question the persistence of the discriminative effects of caste with the evolution from the semi-feudal form of organisation in villages, before the land reforms of the 1950s, to the emergence of a modern market and the reconfiguration of the class relations.

Accordingly, a *continuum* of positions exists. Some consider that the caste hierarchy has been evolving and reconfiguring but continues to prevail, in particular through networks which are strongly developed in informal economies (Basile and Harris-White 2000), Béteille (1992) theorizes the slip from castes to classes with the abandon of villages, while, others, consider that the tilt towards a liberal market creates new opportunities for social mobility and the effects of caste have much weakened (Sharma 2013).

Most of the studies on social stratification in contemporary India have only considered economic mobility within the caste, based on wealth, and little attention has been paid to the social mobility with a definition of class based on occupational categories. Nonetheless, there are some exceptions of recent contributions on social mobility by scholars using national surveys data to develop standard analysis of intergenerational mobility and test the association of caste and class over time (e.g. Vaid 2018, Reddy 2015, Kumar et al. 2002, Motiram and Singh 2012). All of these studies are reviewed in

the present chapter along with a focus on the literature concerning caste and class in India, essential to frame the contemporary debate on social mobility and labour market, to which we contribute the caste study of Palanpur.

This chapter is organized into three sections. First, we discuss the concept of caste: the foundations of the caste-system from the ancient texts and the colonial census; the problem of the definition of caste and the pertinence of the unit of analysis; the concrete manifestations of caste in the social stratification of the rural society in the pre-modern India and its evolution in recent decades; and, finally, the forms of reproduction of the caste's discriminative effects in the labour market. In the second section, we discuss the concept of class and the class formation in rural India, from the first forms of peasantry differentiation to the modern structure of classes. Third, we review the literature on social mobility and caste-class association in contemporary India.

1.2 The caste system in India

The debate on the theorization of caste as a "system" has been initiated by Louis Dumont in the early volumes of "Contributions to Indian Sociology" and carried on especially after the publication of "Homo Hierarchicus" in 1969. The question of the nature of caste, well summed up in the title of one of Dumont's contributions "Caste, a phenomenon of social structure or an aspect of Indian culture?" (Dumont 1967), clearly stands as a major divide in the study of the social stratification in South Asia.

In the early descriptions of caste as a hierarchy of ritual status, caste was projected as an "integrated system" relating to prescription and proscription of practice and behaviour of people, particularly among Hindus in Indian society (Tambs-Lyche 2017). Later, many scholars started to look at caste as a form of social stratification (Bailey 1957, 1963), relevant to the domain of inequality, and to be analysed in relation to the division of labour. To distinguish caste from other forms of inequality, Bailey reduced the difference to open and closed stratification (Bailey 1963), focusing on the social mobility of the individual within a caste rather than caste mobility, as opposed to Srinivas' analysis of the mechanisms of Sanskritization and Westernization.

The major difficulty to study the effects of caste on social mobility is its multi-faceted nature; caste is inter-related with different dimensions and is resilient and dynamic. There is evidence of the caste membership to remain a distinct form of social differentiation, affecting the life chances of the individuals although the relations between different castes have changed with the transition from an agrarian society to a market economy.

Strikes, violent manifestations, aggressions, and claims in the name of caste are a daily occurrence in the national media. Indeed, the debates concerning the inclusive social policies implemented by the Indian government are focused mainly on the forms of discrimination and the inequalities due to the caste stratification.

While there is evidence of the caste boundaries being partially blurred in urban areas, caste continues to influence entire segments of social life in rural areas, where two-thirds of the Indian population still live (Headley 2013). The influence of caste can be observed in alliance strategies, marriages, spatial segregation in the habitat, personal networks, forms of solidarity, electoral behaviour, political affiliation, and even more importantly, in the economic behaviours and labour market outcomes.

The problem of the persistence of caste as a form of social differentiation, attested by the low and stable rate of inter-caste marriage at just 5% in rural India and just little more in urban India (Mosse 2018), remains an open question. Some consider that caste persists in contemporary India because the caste barriers discriminating some groups are opportunities for others in the market. The economic competition is rooted in the inherited structure of social advantages, and disadvantages and those who belong from dominant groups activate their network to maintain their privilege in the modern market (Harris-White 2003, Deshpande 2017). Others explain the persistence of inequalities based on castes with the theory of "durable inequalities" (Tilly 1998): caste involves processes of both categorical exclusions, through stigmatization and discrimination which are very hard to eradicate (Jodhka 2017), and mechanisms of opportunity hoarding influenced by networks which regulate informal labour markets (Munshi 2014).

Despite the centrality of the caste stratification for the understanding of the Indian society, the studies and debates on this issue suffer from the lack of precision in the use of the term caste and its conceptualisation. Although the term "caste" has gained worldwide popularity, it is not a pertinent terminology to use when talking about the ancestral social organisation based on a graded classification of endogamous social groups in India.¹

1.2.1 The concept of caste

The term "caste" has been first introduced in India by the Portuguese missionaries. The Portuguese word *casta* means "race, lineage, breed" and is

¹Therefore, we continue to use the generic term caste in the next paragraphs, when we refer broadly to the hierarchical social groupings based on the traditional social order. Specific terms are used to distinguish from the broad concept of caste, different systems of degrees of classification.

derived from the older Latin word castus, "chaste", implying the idea of purity ("caste" in New Oxford American Dictionary 2005). There is no exact translation of "caste" in Indian languages, but varna and jati, are the two terms used the most to designate the caste membership (Corbridge, Harriss, Craig 2013). Varna refers to four major groups of ritual differentiation, as conceived in the religious texts, and jati to a myriad of sub-groups, specific to each location. For instance, in Uttar Pradesh, more than 350 different jati have been accounted in the Census of 2011 among the three administrative groups of Other Backward Classes (OBC), Scheduled Castes (SC) and Scheduled Tribes (SC), which, all together, corresponds to approximative 60 per cent of the population of the region. The definition of the concept of caste encounters the same problems of ambiguity than for the choice of the terminology to use. Any attempt to define caste "is bound to fail because of the complexity of the phenomenon" (1932: 1), says Ghurye, one of the founders of Indian sociology. The classification by caste of the Indian population is commonly conceptualised as a social system, a social and cultural institution and a form of social stratification, depending on the emphasis given in the definition:

"Caste is an ascribed form of social stratification characterised by endogamy, rigid hierarchy, and status delineated by hereditary occupations, ritual purity and pollution rules. (Beteille 1996:46)."

"The caste system divides the whole society into a large number of hereditary groups, distinguished from one another and connected together by three characteristics: separation in matters of marriage and contact, whether direct or indirect (food); division of labor, each group having, in theory or by tradition, a profession from which their members can depart only within certain limits; and finally hierarchy, which ranks the groups as relatively superior or inferior to one another. (Dumont 1972:57)."

"Caste is a hereditary, endogamous group which is usually localised, it has a traditional association with an occupation and a particular position in the local hierarchy of castes. The relation between caste are governed among other things by the concept of purity and pollution and generally maximum commensality, i.e., inter-dining occurs between castes. (Srinivas 1962:16)."

These definitions describe the ideal form of the caste system, and they all converge on fours aspects of caste. Ascription by birth: the caste membership is acquired by birth and transmitted from one generation to the next. Ritual hierarchy: each caste corresponds to ritual status, and the ritual status are ranked on a scale of purity. Homogamy and pollution rule: inter-caste marriages are not allowed, and inter-castes relations are ruled by rigid restrictions to avoid higher castes being polluted by lower ones (direct contacts are totally forbidden between some castes, and indirect contacts, through food

or water, are minimal). Division of labour according to caste: along with the caste membership, each individual inherits the traditional occupation performed by all the members of the caste.

All of the above definitions have in common the historical reference to a hierarchic social order established since Vedic time (1500-500 B.C.) and distinguishing four groups of humans according to their degree of purity; these groups are called *varna*.

In the sacred texts of Hinduism, the *Dharmasastra* (the science of the Dharma), and the *Manusmirti* (Manu's laws), it is said that the four *varnas* (from Sanskrit "colour") were generated out of four different parts of Brahma's body, the god of the creation. Each of this *varna* was associated with a class of occupations ordered on a scale of purity.

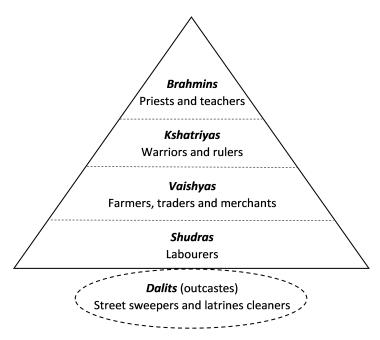


Figure 1.1: The four varna in Hindu texts

At the top of the hierarchy (Figure 1.1), Brahmins are believed to be born from Brahma's head and they are supposed to be priests and teachers; Kshatriyas, from Brahma's shoulders, are the warriors and rulers; Vaishyas, from Brahma's legs, constitute the class of farmers, traders and merchants, and, at the bottom, the Shudras, from Brahma's feet are all labourers, working at the service of the superior varna. Finally, there is a fifth class called Chandalas which correspond to the contemporary category of Dalits, whose members were qualified as "the last among the human beings" (Deliège 2004:20) and were excluded to the village life and prohibited from any contacts with higher

castes. placed out of the *varna* and implied a strict rule of social exclusion. The word *dalit* means "oppressed" and is used to designate the Hindu group with the lowest social and ritual status, considered as "untouchables". The term *Dalit* comes from the Dalits Panthers, a revolutionary movement of the 1970s, and became popular with the Ambedkar's influence in Uttar Pradesh in the 1980s (Jaoul 2012). The militant connotation of the term "dalit" was preferred by the *Dalits* themselves compare to the term "harijan" previously used by Gandhi which means "God's child". In practice, both the terms are still used and overlap in the common perception. The *Dalits* correspond with the administrative category of Scheduled Castes.

The *Dalits* were previously considered outcaste and were allotted to the most degrading jobs in contact with human excrements or preparing dead bodies for funerals. Because they were in touch with the most impure and polluting activities, they have been considered untouchables from the rest of the population, and, before the Untouchability Act of 1955 that banned the practice of "untouchability", they were imposed with many restrictions and forms of public humiliation. For example, they were not allowed to wear shoes or to drink water from the same sources of others.

Nowadays, the discrimination against *Dalits* is less explicit, and these forms of social exclusion based on caste are punishable by law. If the binary oppositions within the social order, between *brahmins* and *non-brahmins* or between caste and outcaste (*Dalits*), are still very present in the common perception of contemporary India, for many people, the *varna* have never constituted a system of representations relevant for thinking the social order. Headley (2013) shows that the *varna* are the less pertinent categories for self-identification in the census operations, and terminology of the intermediate categories (*Kshatriya*, *Vaishya* and *Shudra*) is mostly unknown by the population.

Caste, in common sense, usually refers to a cluster of sub-castes (i.e. jati) and "though it is the caste that is recognized by the society at large it is the sub-caste that is recognized by the particular caste and the individual" (Ghurye, 1932: 19). For this reason, the translation of the term caste usually favoured by anthropologists is the term jati, widely used in Indian languages. The term jati refers to the notions of "birth" and "origin" in Sanskrit and is defined as a birth group, that is, a group structured by kinship and parentage, bearing a specific name and performing a set of specific rituals. The reproduction of this social group is mainly ensured by strict jati endogamy: marrying only within the same birth group. Indeed, endogamy is mainly effective within the jati, while at the caste level we can only talk about a

certain degree of social homogamy.²

In the first orientalist studies, caste was regarded only as a religious feature, and the jati was conceived as a ritual status ranked on a rigid scale of and composing the Hindu social order. Later, the empirical foundations of the hierarchical and rigid nature of caste, as theorised in "Homo Hierarchicus" (Dumont 1968), has become the subject of considerable controversy in the literature. Eventually, justice has been served to the idea of disputed nature of relative rank introduced earlier by Indian scholar Ghurye in "Caste and race in India" (1932). Even the *Brahmin*'s pre-eminence, Ghurye stresses, is disputed by the lower castes of Tamil Nadu, and apart from Brahmins and untouchables at either end of the system, "a large proportion of the intermediate castes think or profess to think that their caste is better than their neighbours" (1932:16). In opposition to Dumont, but a long time before him, Ghurye clearly understood caste as a historical and complex agglomeration of groups rather than as an integrated, hierarchical order. He also noted that food can be accepted from higher but not from lower castes, with the distinction between "boiled" (pakka) and "unboiled" (kaccha) food which characterises these rules, but not all the castes are attached to these rules, and the rules themselves differ between regions. Spatial segregation of castes is stricter in south India, says Ghurye, though some untouchables are everywhere forced to live on the outskirts of settlements. Finally, he shows that tribes and nomadic castes are relatively external to the system.

Historical anthropologist Cohn, argues that the idea of geographically and culturally distant *jati* composing a single ritual order became an institutional reality only since the British administration started to categorise and rank the *jati* of all India in the official census (Cohn 1984). During the colonial period, administrators worked ardently to describe and explain Indian society, to produce the knowledge needed by the "modern" state, notably for revenue collection (Cohn 1970, 1996 in Tambs-Lyche 2018:5) and caste became "a single term capable of expressing, organizing, and above all systematizing India's diverse forms of social identity, community, and organization" (Dirks 2001: 5 in Tambs-Lyche 2018:5). As early as in 1871, a ten-year census was introduced by the British to enumerate the Indian population through the prism of caste membership. Initially, around sixty caste groups, each subdivided into six sub-groups, were reported, but the number increased in

²The two terms, endogamy and homogamy, are often used interchangeably, although strictly speaking, endogamy refers to marrying only within the defined kin-group (tribe, clan, or birth group) as required by customs or law; while social homogamy refers to the socialization customs, including marriage, of a particular group where people have similar socio-cultural background, ethnic origins or socio-economic status (see "endogamy" and "marriage" in Scott, J., & Marshall, G. (2009). A dictionary of sociology. OUP Oxford).

the subsequent census. From 1901 census, the administrators introduced a hierarchy of (sub)-castes modelled on the *varna* system in the attempts to organise the *jati* in a unique scheme valid for the entire territory.

At that time, the Indian population was about 200 million people, across five major religions, and living in over 500.000 villages, each accounting for a population between 100 and 1000 people and divided into numerous castes. The scheme used in that census was composed of around 3000 caste groups, hierarchically organised, resulting from 90000 local endogamous sub-groups, or *jati* (Bates 1995, De Zwart 2000).

The caste tabulations from colonial census appeared as "ranked, standardised and cross-referenced jati listings for Indians on principles similar to zoology and botanical classifications, aiming to establish who was superior to whom by virtue of their supposed purity, occupational origins and collective moral worth" (Bayly 2002:188). Some recent historians, mainly from subaltern and postcolonial schools, claim that the British redefined the caste conceptually and administratively (Dirks 2001, Arnold 2012). Bayly (2002), observes that before the British classification, caste was more of a local form of social arrangement rather than a rigid system, but the British administration imbued caste with a political dimension and exacerbated the power relations between social groups. According to her, the reference to the varna in the classification of castes in the colonial census created a state of competition between social groups, that has permanently changed the landscape of inter-caste relations. In this sense, caste "as we know it today" is largely a product of the colonial mind (Dirks 2001: 5). Guilmoto (1998) stresses that the colonial way of classifying the society in separated and graded entities has influenced the logics of social identification with some groups who perceive themselves as different than others and adopt specific behaviours to reinforce the social differentiation. This process has contributed to shaping the segmentation of the economic and political life in India in groups with different socioeconomic status, competing with each other to experience upward mobility.

1.2.2 Caste as a factor of inequality and domination

During the colonial era, the culturalist approach in social sciences was predominant, and the caste system was considered mainly as a ritual order based on the religious notion of purity, rather than a structure of socio-economic inequalities. Later, a more sophisticated approach to caste highlighted the multiple dimensions that caste encompasses (Lindt 2013). A biological one relating to the principle of endogamy and the inheritance of the membership by birth; a political dimension in the sense that caste constitutes a system

of dominance; an ideological dimension associated to the ideas of purity and impurity, and, finally an important economic dimension. One of the main features that characterise the concept of *jati* is the link with the traditional occupation associated with it and transmitted inter-generationally.³ Indeed, many castes bear the same name as their traditional occupation: *Brahmin* means priest, *Nai* barber, *Darzi* tailor, *Dhobi* washerman, etcetera. Incidentally, some name of *jati* become customary labels for the specific job that was traditionally performed by that *jati*, even when performed by others. For instance, the name *Beldar*, historically designating a nomadic caste from Northern India mainly involved in their traditional occupation of navvies (manual labourers working on major civil engineering projects), became a generic term used in Uttar Pradesh and Madhya Pradesh used to call the helpers of the foreman in the construction sector, regardless of their caste membership.

However, it is not possible to dissociate any dimension from the others, and their interaction constitutes the whole system.

Marriot (1958) remarks that the degree of purity of the *jati* is deeply influenced by the associated occupation: "the same activity is more polluting if it is the object of the specialization than if it is practiced within the household" (in Dumont 1970:93). Moreover, he argues that the cohesion of the whole system hangs firstly because of the religious characteristics of each *jati* perpetuated by the rituals and customs, and secondly because of the economic dependence of each *jati* toward the others.

In the pre-modern Indian society, the organization of the economic life was inter-related with the caste hierarchy: the professional vocation was assigned by birth, according to the *jati* and the lower castes were producing goods and providing services to the higher castes in exchange of their protection and non-monetary compensations fixed by the *Panchayat* (local self-government organizations). There are different *Panchayats*: the *Caste Panchayat* who deals with the issues of one caste, the *Customary Panchayat* (CP) and the Gram *Panchayat*. The CP is a forum consisting of all the senior caste leaders in a multi-caste village. Thus, it is essentially a council of elders (or leaders). The head of the CP is usually the senior caste leader of the dominant caste group. The CP has various functions related to social issues: dispute resolution, management of temple activities (e.g. organization of festivals, processions, maintenance), resolution of specific problems like financial help to victims of accidents and utilization of village funds for economic activities or temple and ceremonial issues. The *Gram Panchayat*

³For detailed discussion on the link *jati*-occupation as per the caste rationale see Dutta 1968, Ghurye 1969, Dumont 1980, Deshpande 2010, Dube 2012.

is a unit of self-government that gained constitutional status in 1992 through the constitution act (73rd amendment); a council composed of representants of the different castes (approximately 80% OBC and 10% SC-ST and 10% Brahmins and others). The GP has more political role at the state level than the CP: the two institutions do not occupy the same areas. Nevertheless, there are strong interactions between them. The CP influences the GP especially during elections about what concerns the village.

In the early twentieth century, many sociologists and anthropologists began to study, under the heading of "jajmani system", the systematic interchange of goods and services between lower castes and higher castes in village society, emphasising the cooperative dimension of the caste system. Wiser describes this system in the following words: "Each caste in the village at some time during the year is expected to render a fixed type of service to each other caste. In return for the various services rendered, there are payments in cash and kind made daily, monthly, biyearly, per piece work, and on special occasions, depending on the type of service rendered and in part on the good will of the jajman" (1937:45). Jajman, from the Sanskrit "yajamana", means "high priest", and was the name given to the landlords for whom the service castes worked.

Wiser claims that the economic interdependence between *jati* builds non-kinship relationships based on some of the qualities that also kinship relations have: reliability and durability. Wiser considers this aspect to be very important for the welfare of the villagers because it ensures a stable level of employment. Béteille (1969), who analyses a similar system in South India, talks about inter-caste reciprocity in the sense that service castes have some expectation of receiving personal support from the landlords in case of family emergencies or factional quarrels. Such reciprocal services are often formally stipulated, especially for life-cycle rites, but go beyond a simple market transaction.

Later, with the spread of systematic village-based fieldwork and the evolution from the "book-view" to the "field-view" over the caste system (Jodhka 1998), these studies have become the subject of many disagreements and have been considered as "anthropological constructions" (Fuller 1989), charged with "inventing the village tradition" (Mayer 1993). In fact, the pre-colonial society is often portrayed as a self-sufficient and politically autonomous society where castes of different occupations, inherited by birth, used to collaborate through reciprocal exchanges: "The economic organization of the traditional Indian village is often quoted as the typical example of an economic system completely freed from market laws and instead regulated by rights and privileges instituted by customs; as if it was a perfect illustration of the opposition between traditional economies and monetary systems

of exchanges" (Deliège, 2004: 180, our personal translation from French).

A first critic addressed to these examples of traditional Indian villages relate to the innate nature of the *jajmani* rights and the link between caste and occupation. The caste specialisation in a sector of activity according to its degree of purity, has been established to be a distinctive trait of the caste system and is an essential feature of the *Jajmani System*; however, this trait should be nuanced. Ghurye (1932) stresses that some occupations, such as trade, soldiering, agriculture and farm labour, were always open to anybody regardless of caste, and the inheritance of occupation along a caste lineage was not a general rule. The first evidence of this argument was formulated by Mr Blunt, the superintendent of the 1911 Census. He calculated the correlation rate of caste and occupation in the North of India and obtained that, not surprisingly most of the castes traditionally involved in cultivation performed agriculture, but this was not the case for many service castes, like oil-presser (the caste of Teli) and launderers (the caste of Dhobi). Only half of the members belonging from service castes were involved in their traditional occupation, and even more, in the case of Brahmins, only 10% of them were priests (Blunt 1969 in Deliège 2004:170). Even before Blunt's statistical analysis, Baines speculated that the occupation associated with a caste "is a traditional one and is not by any means necessarily that by which all, or even most, of the group make their living in the present day" (1912: 59). Incidentally, the distinction between the present and the past seems to have been as important in 1912 as it is today, and the idea that the division of labour based on the caste membership would have weakened and disappear in the "modern" society, was already there.

Landy (1994) indicates the circumstances under which the traditional occupations would increasingly dissociate from the service castes. First, the impact of the demographic expansion on the labour offer. The demand for barbers or launderers is limited in a closed society, like in a village, and the transmission of the occupation should adapt to the practical needs. Generally, only the eldest son was the one who inherited the occupation of the father, and the others dedicate themselves to different jobs. Secondly, the economic development of the agrarian societies has led to the emergence of new jobs (e.g. drivers, marble polisher, painter, etcetera), which do not correspond to any specific caste. Thirdly, the modernisation of the living standard and the consumption habits has also troubled the traditional jati-occupation link. For instance, handmade pottery was the only available option to the villagers for having utensil in the kitchen or to keep water before the diffusion of metalware and plastic ware, and so the potter was necessary in the village, but this is not the case anymore. The increased connectivity of the villages with the urban areas has also contributed to diversify the needs and

to substitute traditional items with other objects available in the markets.

Some criticise the description of the Jajmani System as an idealistic model of pre-market economy and blame it for having occulted behind the idea of solidarity and reciprocity, the social injustice inherent to an oppressive and unequal system, where the economic inter-dependence between castes perpetuates de facto the social asymmetry (Miller 1986, Fuller 1989). Beidelman (1959) points out the centrality of the unequal distribution of land ownership among the population for the surviving of this system that he defined as of "semi-feudal" type. The land is not only valued as an economic resource but also as a social marker providing power to the landlords over the others. The jajman, controlled the entire organisation of the economy, through the ownership of the land. The caste of services, owning no land, were tied to the landlords, to whom they provided services and goods.

In opposition to the idea of reciprocity, Breman (1974) and Gould (1958), describe this kind of relationship as a form of patronage legitimating the exploitation of the service castes. They believe these systems to be one of the instruments of coercion wielded by high landowning caste. In this sense, it appears very clearly from the functioning of the Jajmani System, how the concept of dominance is crucial to the understanding of the caste relations. M. N. Srinivas (1959), one of the most influential Indian anthropologists, has highlighted the role and the formation of the "dominant castes" in the village society. According to Srinivas, "a caste may be said to be "dominant" when it preponderates numerically over the other castes, and when it also wields preponderant economic and political power. A large and powerful caste group can be more easily dominant if its position in the local caste hierarchy is not too low" (Srinivas 1955: 181).

Dumont argues that the criterion of numerosity is not always valid: the most numerous castes in a village is generally either the dominant caste or the castes who provide the labour force. Labourers are usually landless, and because the labour force is their sole economic resource, they generally have a higher fertility rate than others. For Dumont, the dominant caste is the one that has the "superior rights" over the land or a large part of it and the "village community" is economically and politically subordinated to this group. Because the members of the dominant caste control the land, they are determinant in the distribution of work, the repartition of goods and the level of production.

Béteille (1965) observes, in the village of Sripuram in Tamil Nadu, that the *Brahmins* are also those who own most of the land. He concludes from this observation that the dominant caste coincides with the caste ranked at the top of the ritual hierarchy, that means one of the highest castes in terms of purity. However, Srinivas' findings in the village of Rampura, in Karnataka, contradict Béteille's conclusions. According to his definition of dominance, he found that in Rampura, a *jati* of peasants, (*Shudras* in terms of *varna*) and not *Brahmins*, was the dominant one. The ritual status of peasants is not very high, but in 1948, at the time of Srinivas doing fieldwork in Rampura, this *jati* of peasants owned more land than all the other castes put together. There were also more literates and educated men among this *jati* than the others, and the three most important patrons in the village belonged from that *jati*. The headman of the *Panchayat* was one of these; he was the biggest landowner of the village.

Srinivas observed that the people of this *jati* commanded respect from everyone in the village including the *Brahmins*, despite the fact that *Brahmins* are ranked much higher in the ritual scale. The dominance of peasants increased in Rampura after the *Brahmins* started to sell out their lands to move to the cities and enter the new white-collar professions. The peasants bought their lands and became the biggest landowners. Because the land is not only an economic resource but also a marker of social status, and the entire social system of the agrarian society is organized around the figure of the landowner, who is considered a supreme authority in the village, the *jati* of peasants substituted the *Brahmins* at the top of the social hierarchy.

With the development of the modern economy and the land shortage resulting from the demographic expansion and the land fragmentation,⁴ land and agriculture have weakened as a basis of caste dominance. Upper castes have been withdrawing from the agrarian economy and dominance is replaced by fragmented centres of power or networks mediating access to credits, state schemes, markets or privileged jobs (Gupta 1998, Jeffrey 2002).

In the conclusion of a recent article entitled "Does landlordism still matter?" Harriss (2015) states that, with the passage from a semi-feudalism to a market situation, the differentiation and polarisation of peasant classes have almost frozen, because of how present-day classes of labour reproduce themselves through a range of mostly precarious activities. He says that "land is no longer so much the basis of status of power, and poor lower-caste people have loosened the ties of dependence, however, a new patterns of inequality, exclusion and adverse incorporation are clearly emerging and sometimes involving the reproduction of their local power by some of those, at least, from the old locally dominant castes of the landlords" (2015:362). Breman's studies over the past half-century in south Gujarat lead to similar conclusions: "the idea of natural inequality continues to be the cornerstone of the social fabric" (2007:438) with the implication that caste continues to act as an

⁴The relation between land and population in Palanpur constitute the main object of discussion in the chapter 2.

institutionalised system of social exclusion and discrimination in rural India.

Moreover, Srinivas introduces the idea that not only land and economic wealth, but also new criteria of dominance should be considered to understand the reconfiguration of the social hierarchy in modern India. In particular, the number of educated persons per caste and the occupations they pursue matters for dominance, more than the ritual status. He defines this criterion as "Western", because, in his view, it is the results of a process of westernization enhanced by the contact of the Indian society with the British. According to him, the villagers in Rampura were aware of the importance of this "western criterion" for upward mobility, because it brings political power and privilege in getting administrative jobs: "They would like their young men to be educated and to be officers in the government. As officers, they are expected to help their kinsfolk and caste folk" (1959:1).

Contrary to the colonial stereotypes of the caste society as static and passively determined by religious ideology, this finding show that upward mobility is possible at the caste level: "when a caste enjoys one form of dominance, it is frequently able to acquire the other forms as well in the course of time" (1959:3). The acquisition of the other forms of dominance often implies the process defined by Srinivas as sanskritization (1952, 1966): the emulation of the rituals and practices of the upper or dominant castes.

With the transition from an agrarian society to a modern economy and the structural transformations of the 20th century, these patron-client relations have been almost fully disintegrated. At a political level, there has been a diffusion of associations defending the interests of the castes oppressed, and a larger electoral participation among them; at the social level, episodes of caste mobility occurred with the phenomena of Sanskritization and Westernization; and at the economic level, money has substituted payments in kind and crops, and work relations have started to be contractualized. Nowadays, we can still find residual forms of Jajmani System, where specific caste of artisans, for instance, barbers and guards (watchmen), are tied to the dominant castes in the same terms, but they are few exceptions and the bound with the landlord is more flexible. According to Epstein, market transactions in villages sometimes overlap with hereditary relations of patronage: "Each peasant patron household offered its clients a modicum of social security by providing them with an annual reward in kind at harvest time; in return, the clients were committed to performing different types of services such as craft or farm labour, for which they usually also received a daily wage. Clients were also expected to provide political support and ritual services for their patron households; for example, the SC (Scheduled Castes) client would have to carry the torch ahead of his patron's funeral procession" (Epstein 2007:202).

Rather than a proper erosion of the *Jajmani System*, Lerche (1993) talks

about the "modernisation of relations of dominance", at the disadvantage of the lower castes. Violent forms of exploitation and unfreedom in labour relations, defined as neobondage, have been emerged all over India in the informal sector. These cases of labourers being tied to an employer or a labour contractor through advances or loans have been observed in many parts of India in modern agrarian production (Lerche 1993, Breman 1996), manufacturing (De Neve 2008, Heuzé 1989), construction sector (Sen Gupta 2011, Picherit 2009), brick-kilns and sugarcane mills (Guérin et al. 2009, 2012).

However, in contrast with the evidence suggesting that the caste hierarchy has been evolving and reconfiguring, but continue to prevail as a factor of socio-economic inequalities (Basile and Harris-White 2000, Kumar 2002, Deshpande 2010, Vaid & Heath 2010, Mosse 2018), some scholars argue that the "stickiness of caste" has weakened over time, and the tilt towards a modern economy creates new opportunities for social mobility (Béteille 1992, Panini 1996, Sharma 2013).

1.3 The reproduction of caste in contemporary India

With the Independence of India in 1947 and the Land Reforms of the 1950s, there was a consensus, inspired by Gandhian utopianism and Nehruvian socialism, of archaic caste to disappear with the economic development creating the opportunities for the meritocracy to break the social cleavage of the traditional society. There were expectations of the society of castes to evolve and become a society of classes (Béteille 1992), with urbanisation and the transformation of the economic structures, on the pathway set by industrialised countries in the West.

Nonetheless, historical disadvantages of extremely backward castes were recognised in the Indian Constitution, and the government provided special protection and benefits for ex-untouchables, in the forms of fixed quotas or reservations in public sector employment and higher education to the Scheduled Castes and the Scheduled Tribes. Initially, the condition for a caste's group to benefit from affirmative actions, and so, to be included in the administrative category of SC/ST, was to suffer from extreme backwardness arising out of the practice of untouchability.

However, there was not an official definition or a test to prove such untouchability (Dirks 2001), and the same treatment did not apply to Muslims and Christians, even if many of them experienced similar forms of discrimina-

tion than Hindu untouchability (Mosse 2012). De facto, this policy brought the castes in the realm of political competition (Jaffrelot 2006, Jayal 2015). Not only backward castes from religion other than Hinduism but also uppercastes, having lost their supremacy with the reconfiguration of the social hierarchy, claimed their rights to benefit from the same favours conceded to the ex-untouchables.

In 1979, a special commission (Mandal Commission) was established to assess the situation of the socially and economically backward castes. The commission estimated that 52 per cent of the population was backward, using data from the first census of 1931, and in 1980 the state extended affirmative actions to a loose category called "Other Backward Classes" including more than 3000 different *jati*. The idea behind this policy was the one of social justice promoted by Dr B.R. Ambedkar, the first law and justice minister of independent India, the major architect of the Constitution of India, who addressed caste discrimination as a matter of socio-political rights to compensate with a "system of graded inequality", rather than a matter of Hindu religious reform (Mosse 2018).

The overall impact of affirmative action on the narrowing of the gap between groups of backward castes and upper castes is challenging to estimate, and the question is very controversial among scholars. Deshpande and Ramachandran (2016) analysis of inequalities between SC/ST, OBC and other castes, show widening disparities from 2000 to 2012 in most of the social and economic areas observed. The gap increased especially in higher education and access to prestigious occupations. Similarly, they find that the caste wage gap is bigger at the top of the income distribution (the "glass ceiling" effect (Deshpande 2017)). One could think that without reservation, the widening would have been even more significant; indeed, this is the case for Muslims, who, without reservations, experience a worsening of income and education compared to the others (Hnatkovskay and Lahiri 2012). However, discrimination against Muslims is not entirely comparable with caste discrimination, and it is very much possible that, even if caste effects weakened, social exclusion based on religious affiliation continues to act as a barrier to social mobility.

Hnatkovska et al. (2012) find an improvement of SC and ST group compare to other caste groups, from 1993 to 2005, in terms of education, occupation, consumption and income, but conclude that the factor influencing the most the narrowing of the gap is the improvement in school education, and attributing the merit to affirmative action is difficult since it only targets higher education. Overall, it is difficult to isolate the effects of affirmative actions on the social mobility of SC and ST from other structural effects like the wider access to primary education, the betterment of infrastructures and

the increased connectivity of villages with towns (Chakraborty and Guha 2009, Hnatkovskay and Lahiri 2013). Furthermore, some scholars speculate on the side effects of reservation policies and argue that they contribute to perpetuate caste as a category of self-identification, penalise the meritocracy with unfair advantages given to lower castes, and foster corruption to benefit from quotas (Jodhka 2017).

In the 1990s there was an upsurge *Dalits* activism for an anti-caste development that encouraged the emergence of a new field of research conducted with a "perspective from below" critical against the argument of the pushes to remove the focus in the political agenda from reservation to the broader role of caste in the social and economic development. Authors like Anand Teltumbde and Gopal Gupta blame the media for praising the stories of successful *Dalits* who access to higher education, enter white-collar professions or develop their enterprise, overshadowing the large chunk of people who remain still deprived because of discrimination emanating from the caste social structure.⁵

Indeed, reducing inequalities with compensatory policies does not prevent from practices of discrimination and exclusion based on stigma and prejudice.

There is an extensive debate among sociologists over whether caste is no longer a factor of social discrimination and differentiation within the reconfiguration of the labour market and how it relates to social disadvantage. Gupta says: "No longer can we link certain castes with occupations as used to be the case in traditional India. This itself is a forward movement as it has freed the traditional lower castes from performing degrading occupations. Even so, as caste identities are still very strong, one must realize the impediments they set for a modernist attitude to develop" (2007:118).

The longitudinal study on a group of villages located in the region of Coimbatore (Tamil Nadu) carried by Heyer (2009) from the mid-1980s until the early 2000s, provide significant evidence of the marginalisation of rural Dalits in the modern economy. Heyer concludes one of her contributions stating that "neither the modernisation of agriculture, nor urbanisation and industrialisation, has led to significant changes in the relative position of SC (Scheduled Castes). SC still face considerably greater barriers to progress than others among the working poor" (2009:240). Despite the flourishing industrialisation of the 1980s in the close cities of Coimbatore and Tiruppur "the opportunities for the majority of them to move into employment other than low skilled manual labour were very few" (2012:91). Although some positive changes have been observed by Heyer during the survey period (i.e.

 $^{^5{\}rm For}$ an overview on Dalitstudies see Zelliot 1992, Omvedt 1995, Gupta 2000, Kandyil 2009, Teltumbde 2010.

untouchability became less severe and there has been some progress in the social and political position of low castes in the villages surveyed) the subordination of Scheduled Castes to higher and dominant castes remained acute (2009:227).

Caste has a dynamic and resilient nature and "the modernity of caste" looks more like "a system that institutionalizes humiliation as a social and cultural practice" (2015: 12), rather than a frozen rank of status. The modernization of the economy has transformed caste with a "shift from hierarchy to identity and the re-coding of caste rank as cultural difference into competing for kin-ethnic interest groups" (Fuller 1996, Gupta 2004 in Mosse 2018: 432).

Different case studies across India show that the access to occupations in the labour market is shaped by inequalities inherited from village caste orders (Shah et al. 2018). Some castes withdrawing from stagnating agriculture succeeded to get skilled managerial positions in urban sectors. Service castes sometimes build new activities out of their traditional occupation: for example, ex-potters open hardware stores; ex-dhobi (washermen) open laundries, barbers open beauty parlours etcetera (Harris-White 2003, Wadley 1994). While others, at best gained casual manual jobs. Still (2015) claims that the differential caste distribution in the labour market is influenced by landownership: those who controlled land in the village hold higher positions in the labour market. Caste inequalities are also reproduced trough mechanisms of clientelism: networks of caste-folks who concentrate in an economic niche to maintain the monopole over their resources.

Mosse (2018) distinguishes three mechanisms of caste segmentation in the labour market: occupational ranking, network effects and categorical exclusion.

First, occupations in the labour market are graded by prestige, income, qualification, regularity, danger, insecurity, (and so on), and the distribution of castes along the scale of occupations is influenced by a differential evaluation of work and workers, which is in partly residual of the archaic notions of purity and pollution. When Ambedkar wrote: "The caste system is not merely a division of labour, it is also a division of labourers" (2002:263), he meant that the labourers are bounded to a caste stigma which is projected on the kind of occupation they perform. For instance, in south Indian restaurants cooks and suppliers are almost exclusively Brahmins (Iversen and Raghavendra 2006); probably because of a particular idea of purity related to the food consumed and prepared by high castes. At the extreme opposite, manual scavenging of sewers is a prevalent practice assigned to the lowest Dalit castes, including by public contractors like the Indian Railways (Tam 2013, Singh 2014), though it has been officially declared illegal in In-

dia. Manual scavenging is the practice of cleaning, carrying and disposing of human excreta from dry latrines or sewers. Despite this dehumanising and death-risky practice, has been banned by law after too many cases of mortal accidents happened, it is still very diffused across the country, and it is systematically done by the lowest castes. Similarly, in the informal waste economy in Tamil Nadu, analyzed by Harriss-White, the "social cost of disposal of noxious waste is placed on undervalued humans, socially shunned through discrimination of their group identity as well as the characteristics acquired from their occupation" (Mosse 2018:7). These examples show how, despite the link between the jati and the traditional occupations has almost disappeared, the caste legacy persists to segment the labour market, and even in urban markets the caste stigma remains strongly associated to the allocation of the occupations.

Second, workers are segmented by caste through the informal processes of labour recruitment based on a complex chain of contractors and subcontractors who use to recruit among kin networks to offer to employers loyal workers. In fact, recruiting from the same network has the advantage of creating a psychological pressure on the labourer, who is aware of his or her reputation, and thus to compensate with the absence of a formal agreement. Indeed, social networks are particularly developed in the informal economy (Harriss-White, 2003). In this sense, caste is comparable to a network process that contributes to regulating the structure of opportunities in the labour market (Munshi 2016, Witsoe 2017).

For the dominant caste, the network-effect of the caste can be a resource offering protection, access, mediation and control, beyond the state regulation, to maintain their economic privileges and hamper the competition with other groups. But networks can also have a trapping effects ("the downside of the social capital" Portes 2014) for the disadvantaged castes who tend to get channelized, within their bond network, in a particular sector of activity, or to a particular work-site, and thus, they can hardly diversify their social environment and benefit from the "strength of the weak ties" to create new opportunities (Granovetter, 1977).

Third, as opportunities concentrate among a caste network, also exclude others as a category, regardless of the individual characteristics of the single labourers. Tilly calls this phenomenon "categorical exclusion" (1998). There is also another form of exclusion based on the taste for discrimination. We can illustrate this second form of discrimination by taking the example of a group of casual workers, recruited via an established network of migrants from Bihar in a construction site in New Delhi. There are little probabilities that someone from that group of workers, will ever have the chance to get skilled or better-paid jobs, because belonging from that group means to

stick to the stereotypical category of "Bihari casual workers", independently of the intrinsic motivations of the single workers or the individual qualifications. These three effects not only shape the categorical distinctions and the occupational differentiation from the demand-side but, by influencing skill acquisition, social capital and opportunity hoarding, they make them become self-reproducing (Corbridge, Harriss and Jeffrey 2013, Munshi 2016, Tilly 1998).

In his last book "Caste in contemporary India", Jodhka (2018) focuses on the ways caste is perpetuated in the expanding private sector. Despite the doxa of the meritocracy, associated with the idea of a modern society, and according to which individuals should be judged in the light of their skills and their merit rather than their social identities Jodhka states that "caste appeared to matter in business in many different ways, directly and not so directly" (2018: 112). The book is the outcome of a comprehensive field survey carried out over the last decade, mainly in Bihar. The author tries to understand if the principle of meritocracy associated with the idea of the modern society, applies to the Indian context and if the caste identities do not interfere with the merit.

The most interesting finding concern the Dalit entrepreneurs, whose narratives, collected through interviews, reveal various forms of discrimination and social barriers towards low castes in the urban realms. Dalit experience in business and new occupations highlight that social stigma and prejudice based on caste identity still override economic capacity and educational qualifications even in urban settings.

Prakash (2009) states similar conclusions from his interviews with 90 Dalits entrepreneurs from six different States in India: the norms, beliefs, values and practices related to the caste identity nurture, rather than dissolve, discriminatory attitudes and behaviors by members of the upper castes against Dalits business (2009:310).

Jodhka also shows that, in the corporate IT sector, human resources have practices of caste discrimination in recruitment interviews. The stigma of caste is hidden behind the discourse of the meritocracy but results in mechanisms of corporate hiring. "Caste is blinded" (2018:68) but still judged in the soft skills, attitudes and family background of the candidate. Moreover, the stigma also acts at the level of the subjectivities and self-worth. Caste acts as an "imprisonment of the mind" (Mosse 2018: 433). Caste stigma is an inner experience, associated with self-worth, dynamics of pride, fear or anxiety, embodied attitudes and self-confidence. In Bourdieu's perspective, caste is reflected in the "habitus": the disposition and feelings shaped by social recognition and prejudice. (Jadhav et al. 2016, Corbridge et al. 2013).

1.4 Foundations of class and theoretical debate

For studying social mobility in a given society, one needs first to classify different strata of the population in a class structure. The class analysis aims at assessing the structure of inequalities. Defining the concept of class and the class' boundaries is necessary for the study of the social stratification intended as "the empirical investigation of the consequences and corollaries of the existence of a class structure defined ex ante" (Breen and Rottam 1995:453).

We broadly conceive a class as a grouping of individuals or households who share a similar position in terms of economic wealth and social status in a system of social stratification. The position depends on the roles assumed by the individuals forming the class within the social division of labour and the status attainment in the labour market (Breen 2005, Goldthorpe 2000, Schizzerotto 1993, Cobalti and Schizzerotto 1994, and others). The access to the position depends on social and economic resources owned by the individuals and their families. Indeed, the primary resources of power or capability that one has to attain a job position depend on the control over the means of production, the formal qualifications acquired through education, the technical skills, the social capital, the labour force, and other forms of capital (symbolic and cultural).

In the sociological tradition, the first thinkers of class as a central unit of analysis of the society were Marx and Weber. Both are at the very foundations of the contemporary class analysis where the Marxist class analysis is at the origins of the work of Wright who extended on the original dichotomous schema of Marx with the introduction of the middle class, while the neo-Weberian class analysis is associated to the class schema developed by Goldthorpe and his co-authors.

Both, Marxist and Weberian class theories are rooted in the historical context of the advent of industrial capitalism in the 19th-century western-Europe, the creation of an enormous amount of wealth, and the consequent increase of disparities in the distribution of wealth among the population, leading to a profound discontent provoking protests and movements. If some aspects of their analysis converge, there are some profound differences which continue to be debated in contemporary literature.

1.4.1 Weber and the neo-weberian approach

Unlike the Marxist dichotomous conception of class, Weber develops a multidimensional conception of the social stratification where class consists of only one dimension. In his view, there are three different hierarchical layers

in the society which do not necessarily overlap with each other. These three layers correspond to the three spheres of analysis in the Weberian analysis of the society: the economic order (where classes are rooted), the political order (where parties organise the power to achieve their interests) and the social order (where the social prestige is hierarchised in groups of status). Within this analytical framework, the class is defined by Weber within the sphere of economic interaction, but, contrary to Marx, he believes that class not necessarily involve collective consciousness or action. At the contrary, status groups, which are defined with the sphere of the social order, or what Wright calls communal interaction, always imply some level of collective identity in the sense of some "positive or negative social estimation of honour" (Weber 1921:932).

"Classes are groups of people who (...) have the same economic position. Ownership and non-ownership of material goods, or possession of definite skills constitutes a class situation. Status, however, is a quality of social honor or a lack of it and is in the main conditioned as well as expressed through a specific style of life" (Weber 1921: 39).

Finally, the party always implies collective action "As over against the actions of classes and status groups, for which this is not necessarily the case, party-oriented social action always association. For it is always directed toward a goal which is striven for in a planned manner" (Weber 1978:938). According to this schema, members of a class become a status group when they become conscious of sharing a collective identity, and they become a party when they organise on the basis of that identity (Wright 2002). Class, status and party do not necessarily overlap: one may possess high status independent of class position and vice versa. For instance, the owner of a liquor shop might have a good market situation and enjoy from a good wealth but, in some societies, he/she would not benefit from positive social esteem because his/her activity is not considered as honourable by the society. Indeed, the social order is associated with a symbolic dimension of honour.

Weber defines status groups as communities or "plurality of persons who, within a larger group, successfully claim a special social esteem and status monopolies" (Weber 1958). The social status is differently valued within the social order and contribute to place a group above or below the others and to confer a relative amount of power.

Social status, in Weber, is typically founded on the style of life, education (formal and informal) and the corresponding forms of behaviours and knowledge and hereditary or occupational prestige. In practice, status expresses in society through connubium (marriage), commensality (eating together and sharing intimacy), monopolistic appropriation of privileged modes of acquisition, and status conventions and rituals (Weber, 1921).

Weber refers to the caste system in India as an "ideal type" of his notion of status groups and he construed as an extreme case of a completely closed status group based on the principle of total endogamy: one born, marries and dies within the caste. Weber dedicates an entire section of his famous essay on the sociology of religion to the study of religion and society in India. His study was based on the major Sanskrit scriptures of the Hinduism that have been made available in translates versions by orientalists of his time. Weber never been in India, but he was well acquainted with these sources. Later his contribution on Indian society have been largely criticized for considering caste as an essential aspect of Hinduism "before anything else, without caste there is no Hindu" (Weber in Lunheim 1993:64). Each caste is hierarchically segregated with specific economic roles and the caste order is reinforced by ritual differences. With the caste system, the distinction of status is historically maintained also by ritual sanction to such an extent that physical contacts with members of caste ritually inferior is considered to be polluting for members of the superior caste.

The Weberian approach to the status groups provides a useful theoretical framework to examine the role of caste in accessing socio-economic resources. Indeed, class and status shape together inequalities of the material and symbolic conditions of people lives. "Class affects the economic well-being directly through the kind of economic assets that an individual brings in the market situation, while status affects wealth indirectly though the ways that categories of social honour, or symbolic recognition, underwrite various coercive mechanisms" (Wright 1999:835). In Weber's words: "class and status go hand in hand with the monopolization of ideal and material goods or opportunities" (1978:935).

The inequalities generated by the monopolisation of material and immaterial resources, or opportunity hoarding, require power to be used to enforce exclusions. In Weber, as in Marx, power plays an important role. For both, the inequalities in wealth, connected to the class structure, are sustained by the exercise of power and not merely by the individual attributes or actions. However, if Weber put the social stratification in the sphere of power and considers classes as a manifestation of different levels and uses of power in the society, power in Marx is strictly inherent to the control over the means of production and the capital, and this constitutes a big difference between the two approaches. Weber elaborates furtherly the conception of power, defined as "the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance" (Weber 1978) and he asserts that "economically conditioned" power is not all identical with "power" as such. While power may lead to social recognition, or status, the mere "economic power" is by no means a basis of social recognition.

Weber agrees with Marx that a class is made up of individuals who share similar economic interests, a similar level of control over skills and goods, and the income they can make from these resources. However, Weber develops furtherly the concept of inequalities, using the notion of "life chances": the opportunities that an individual has to access to resources and to obtain particular social and economic outcomes out of them, or the probability of gaining a position in life.

For Weber a class is a group of people who have in common the specific economic component of their life chances, "this component is represented exclusively by economic interests in the possession of goods and market opportunities". In other words, the probability of producing a surplus, attaining a position in life and gaining social recognition, is primarily determined by the resources that individuals bring to the market, such as social networks, skills and education, which create a "class situation" (Giddens 1973, Breen 2005). The individual "class situation" depends primarily on the "market situation": those who share a similar class situation also have similar life chances.

Weber distinguishes three categories of class: "property class", "mercantile class" and "social class". The classification of Weber is more sophisticated than the Marxist one in that he first distinguishes between those who own property or means of production and those who do not own anything, and then he further differentiates both groups "according to the kind of property that one has (...) and the kind of services that can be offered in the market" (Weber 1978:928).

The property class includes the individuals owning wealth, capital and means of production and receiving income from their different assets (rentiers or capitalists). The members of the mercantile class make their living out of the marketability of the goods and the skills they control; for instance, entrepreneurial skills, specialist expertise and qualifications, but also peripherical soft assets like social capital and political connections. Typically, Weber describes the privileged members of this class as being managers.

In the third category, called "social class", Weber identifies four distinct groups: the upper class with dominant managerial and propertied members, who are the most privileged through property and education; the white-collar workers composed by technical specialists and civil servants; the petty bourgeoisie of artisans, farmers, traders and professionals; and, last, the working class.

The concept of social class in Weber, which corresponds to an aggregation of economic positions, or occupations, is not based simply on the workings of the market but also on extra-economic factors that intervene "to transform economic relationships into social relationships" (Weber 1978:302) and in particular to facilitate social mobility, such as social capital, skills and

education (Breen 2005). In other words, "social classes" are defined by Weber by the forms of social interaction within the economically defined classes. Weber argues that social mobility between social classes is infrequent and difficult, but social mobility within each of them is relatively common (Breen 2005). Therefore, he identifies the social boundaries between these classes on the basis of the probability that one has to move from a given occupation to another: "A social class makes up the totality of class positions within which individual and inter-generational mobility is easy and typical" (Weber 1978:302).

Compared to Marx, Weber focuses on the market as the source of inequalities in life chances, and he makes no supposition that classes stand in a relationship of exploitation or domination, nor that the classes will automatically develop an antagonism between each other, the members will form a class consciousness and engage in collective action. Weber sees class only as one aspect of the distribution of power in society: "The distinction between class, status and party concerns the different resources that each brings to influence the distribution of life chances" (Breen 2005:42).

If in Marx, the class distinction is fundamental to understand how class conflicts drive historical changes, in Weber class is of interest because it analytically links individuals' market, or economic assets, to inequality in the distribution of life chances.

The Weberian conception of the social structure has inspired of the most used class schema in the contemporary studies of social stratification, developed by Goldthorpe and his associates and commonly named EGP class schema (Erikson, Goldthorpe and Portocarero 1979, Erikson and Goldthorpe 1992). The schema distinguishes occupations on the basis of two main components: the market situation and the work situation. The former refers to the sources and level of economic outcome (i.e. income), the conditions of employment, the degree of economic security and possibilities of promotion associated to a given occupation. The latter, work situation, refers to the level of autonomy and control in the production process associated with the occupation. At the origins of the EGP schema, a class is constituted by an aggregation of occupations that typically share common market and work situations (Goldthorpe 1980:40). This definition relies on the assumption that for each combination of market and work situation correspond to different life chances. In later work, Goldthorpe has introduced a further level of distinction in the definition of the class schema, based on the employment relations. He distinguishes employees from employers and employees, among themselves, according to the nature of their relationship with their employer (Goldthorpe 2007).

For Goldthorpe, the employee-employer relationship can be of two kinds:

a relationship based on a "service contract", which guarantees to the employee some perspective elements like salary increments, employment security and social rights and career opportunities on the long-run, beyond the income; or a relationship of "wage-labour contract" defined by tightly regulated and delimited work and payment arrangements, which are calculated on a "piece" or time basis.

In sum, the Erikson, Goldthorpe and Portocarero EGP class schema is fundamentally based on a tripartite division of employment relations: employers, who hire labour force and thus have authority over them; self-employed workers without employees and employees who sell their labour to employers. Further aspects of the EGP schema are the market situation, especially concerning farm versus non-farm sectors; job rewards; skills requirements; the nature of the labour contract and the conditions of employment; the bureaucratisation of labour and the kind of organisations; and some other considerations proper to the industrial societies.

There are two versions of the EGP schema: the 11-class version and the 5-class version with the four classes of farmers collapse in one. Also 7-class version or 3-class versions are possible to fit the needs of the researchers but, according to Goldthorpe himself, the 11-class version is more convincing than its collapsed version because the fewer classes a schema have, the less homogeneous are the classes and the more confusing is the meaning of the class schema.

Despite some attempts in the literature to raise concerns with the accuracy of the Goldthorpe's class schema (i.e. Evans and Miller 1998), the validity of the EGP class schema has been proved empirically⁶ (i.e. Evans and Miller 2000) and continues to have a strong influence on the modern studies of the social mobility for the conceptualisation and measurement of social stratification.

1.5 The class formation in rural India

The first formalisation of the peasant differentiation in India is rooted in the land tenure system implemented by the British governors in the late 18th century, under the title of *Zamindari* system, from the name of the intermediary figure of the *zamindar* who collected taxes from cultivators to

⁶For an example of controversy toward the EGP class schema see "A latent class analysis of the criterion-related and construct validity of the Goldthorpe class schema" by Evans and Miller (1998) and their later validation of the class schema in "In search of the wage-labour/service contract: new evidence on the validity of the Goldthorpe class schema" by Evans and Miller (2000).

the State. The agrarian hierarchy based on this system consisted of the State at the top, the *zamindars*, between the peasants and the State, who were the effective landholders, and the peasants at the bottom who cultivated the land held by the *zamindars*, and in return *zamindars* collected part of their revenue as tax. Despite a multiplicity of tenure arrangements formalised in the *zamindari system*, none of the peasants had rights of ownership over the land, and their relationship with the *zamindars* was about exploitation (Guha 1997). The cultivators formed a unique block of agricultural labourers tied to the State through the *zamindars*, and the *zamindar* was a sort of "parasitic landlord" (Moore 1966:346).

There is much debate among historians concerning the mode of production in the colonial regime, and there is no consensus among them if it should be defined semi-feudal, pre-capitalist, non-capitalist, or whatever other labels. The real question that continues to feed this debate is "Was there feudalism in Indian History?" and the majority of the scholars seem to have concluded that there was at least an Indian variant of feudalism corresponding to the *zamindari system* (Oommen 1984).

Much of the debate concerned the problem of the tenancy: some argue that tenancy is a feature of the feudal mode of production, while others consider tenancy is not specific to pre-capitalist agrarian regimes but continue to co-exist with capitalist modes of production (Chakraborty 1981, Thorner 1982). Similarly, unfree labour is strictly associated by some historians with feudalism while others consider that some types of unfree labour persist in spite of the development of agrarian capitalism and it would be misleading to dismiss this phenomenon as a residue which would naturally disappear in course of time (Nagesh 1981).

The Zamindari Abolition Act of 1955 and other land reforms have changed the patterns of landholding all over India (Joshi 1975, Lal 1982, Sharma 1976, 1994). Despite uneven benefits of the reforms, there has been a redistribution of land and a change in the ownership of land with the recognition of the right to property as amended in Article 19 and 31 of the Indian Constitution.

The first objective of the reform was to remove impediments to increase in agricultural production as arise from the agrarian structure inherited from the past. The second objective, which is closely related to the first, was to eliminate all elements of exploitation and social injustice within the agrarian system, "to provide security for the tiller of soil and assure equality of status and opportunity to all sections of the rural population". (Government of India 1961 as quoted by Appu 1996).

⁷See Chapter 2 for more details of the Zamindari Abolition Act and Land Reforms in Uttar Pradesh.

After the reform, increased differentiation of peasanty with further economic distinctions has been acknowledged by Thorner (1982) who refers to three main categories of peasants: the landlords called malik; the working peasants called kisan, and the agricultural labourers called mazdur.

Beteille (1974) observes that with the agriculture becoming capitalized in the new agrarian system a new basis of inequality emerged, he specifies that "structurally the problem of inequality can be viewed in terms of three pairs of categories: landlord versus tenant; big farmer versus small peasant and landowner versus agricultural labourer" (1974:91). However, the peasant status is not entirely distinct and static: for instance, a small peasant can be at times a sharecropper and an agricultural labourer. Three points in Beteille analysis of the post-reforms agrarian system are of particular relevance to understand the evolution of the agrarian social structure in rural India: the shift from cumulative to dispersed inequalities, which implies a greater heterogenization of social status; the emergence of a new class of landlords and farmers with a multifunctional character and the diverse social origins of the new class of farmers.

The essential class distinction to understand the formation of the rural classes is the dichotomy of "classes of labour" versus "dominant class", inherited from the pre-reform societies and perpetuated in the modern societies but with a higher internal complexification of employment relations. The distinction is based primarily on the net buying and selling of labour force (Patnaik 1976) and whether households are surplus producers or not (Athreya et al. 1987). Classes of labour include households that only work as agricultural labourers, those who work as agricultural labourers for others but also partially on their fields or in other forms of self-employment, and those who work primarily on their fields and only occasionally sell their labour force for wage work. At the opposite, the dominant class refers to the households who buy labour force and produce a surplus out of it, but the category includes a *continuum* of intermediate positions, from those who only produce hiring wage labourers to those who also work on the land themselves but predominantly hire labourers.

The term "dominant class", in the Indian agrarian society, is particularly appropriate given the interrelations between class and caste in the social structure of the agrarian society. The "dominant caste", as defined by Srinivas and Dumont, typically corresponds to the class of largest landowners in the village. Respectively, Hardiman, and later Puchepadass, use the notion of "dominant peasantry" for identifying "the oligarchy of rich and well-off peasants belonging to respectable castes who hold either as owners or as tenants the bulk of the land rights in each village (...) a category which includes the whole group of peasants of respectable caste who hold enough land so that they

can supply the needs of their families without having to go out for work for anyone else" (Pouchepadass 1980:147) In the Marxist framework the concept of dominant class works as a proxy for the capitalist class, and emphasizes the exploitative aspects of the agrarian relations.

In recent decades a third intermediary category emerged and blurred the boundaries between the dichotomy of dominant class and labour class. This category corresponds to those who produce mostly with household labour but also hires labour force, indistinctively of their ritual's status or traditional norms. This category tends not to dominate in symbolic terms, or to control the political institutions in the same way as traditionally large landowners do, and so they do not belong to the dominant class, neither to the dominant caste. In other terms, the category includes petty capitalists and petty commodity producers, who, at the upper levels, always hire labourers and generate a small surplus that is invested to expand the production, and, at the lower level, do not hire labourers systematically and the size of surplus is not enough for large investment (Pattenden 2016).

Many studies suggest that the emergence of this intermediary class is partly related to the Green Revolution and partly to the diversification of the economy started in the 1970s.

From the late 1960s a series of reforms implemented in India have created favourable conditions for increasing the investments in agriculture: the nationalisation of the banks which relaxed capital accessible at a concessionary rate for the farmers, the technological innovation in agriculture (high yielding varieties of fertilisers, irrigation facilities, commercialization of pesticides and new varieties of grains, etcetera), the price incentives for rural food producers introduced by the Agricultural Prices Commission and the Food Corporation of India 1965, and many public subsidies for farm products, water, fertiliser and gasoil and the reduction of taxation on agricultural income (Varma 1998, Jeffrey 2010).

Rudolph and Rudolph (1998) emphasize the positive returns of these reforms for the expansion of the portion of middle-class farmers. Indeed, after the Land Reforms and the redistribution, the control on land has shifted from a minority of wealthy upper caste farmers to large tenants of other castes. Those who were wealthy enough to secure credits to invest in new technologies became richer and challenged the previous dominant class.

Some scholars (Jeffrey 2008, 2010, Basu 2000, Breman 1993, Harriss-White 1996, Patnaik 1976, Rutten 1995, and others) claim that the initial benefits of rich farmers from these reforms in agricultural policy have facilitated their conversion into the best segment of the emerging non-farm economy: they expanded their agricultural output, they became very wealthy and powerful in the local context and they used, before the others, their economic

and social capitals to invest in new sectors of activity out of agriculture and move into more lucrative small-scale business and white-collar employment. Part of their convention into non-farm activities is also related to the limitation of investment in agriculture imposed by the land ceiling which prevents large farmers from increasing their landholding unlimitedly. These scholars argue that the formation of the dominant class in rural India is rooted in the rural capitalism enhanced by the Reforms and the Green Revolution and linked to the rural industrialization of the 1970s (Baru 2000, Rutten).

However, in the vast literature on the class formation in rural India and the agrarian transformation, from the agrarian society pre-liberalisation to the post-1991 reforms, we also found a different explanation, contradicting the idea that the emergence of the non-farm upper class (i.e. capitalist class) is the result of the surplus in agriculture. For instance, Chari (2000) insists on the role that individual's orientation to entrepreneurship and attitude of hard-working play for the small and marginal farmers accessing the petty bourgeoisie. Others (Mellor 1995) explain the emergence of rural non-farm capitalism using the "prosperity induced model": the increase in agriculture productivity generated higher incomes which raised the demand of farmers for goods of any kind available; the rise of the demand induced the local market to develop and diversify its offer. In contrast with this model, "the distressed induced explanation" consider that the expansion of non-farm occupation among the rural population is the result of the inadequate wage of agricultural labourers and shortage of labour demand in agriculture resulting from the mechanisation and the technological development (Saith 1992).

This explanation seems to find further support in the period post-1991 economic liberalisation reforms: agriculture growth has decreased dramatically during the 1990s, simultaneously the public investment in agriculture and the rural economy has shrunk, which severe consequences for the small and medium farm producers who starved to face the volatility of the international market (Basile 2009). Therefore, many farmers had no other option but to diversify their sources of livelihood and the "pluri-activity" became the predominant response of marginal farmers to the distress of agriculture (Jodhka 2018, Himanshu et ali 2016). From the 1990s onward, evidence shows that non-agricultural wage has become the primary source of income for marginal farmers and landless in rural areas (Lerche et ali 2013). Nevertheless, more than half of the total working population in India stills depends on agriculture for a substantial share of livelihood (Dorin and Aubron 2016).

The changes affecting the agrarian society have led to a profound fragmentation of the labour and diversification of the occupations held by the households. There is an increasing division between labourers, sources of income and wage levels, a complexification of the control of labour through intermediaries and chain of outsourcing and the spread of informal dailybased contracts which allows employers to hire and fire labourers according to the fluctuation of the demand.

In this context, formalising a schema of the class stratification is not an easy task. Most of the schematisation of the rural classes are framed in the Marxist theory of the division between capital and labour. However we have identified two inter-connected limitations in this schema: first, the emergence of the rural middle class and its significance for the rural social stratification is not fairly covered in the available literature as Aslany (2019) shows in her thesis on the rural middle class in India, and second, the criteria that have been used to identify classes in rural India in the previous class analysis are almost exclusively based on the relations of production and land ownership which do not account for many class positions standing between land and capital (Colatei and Harriss-White 2014).

The criterion of the amount of land owned, in the Marxist classification of the rural social structure does not take in account the quality of the soil, the access to irrigation and the differential value of the parcels owned on the market (Colatei and Harriss-White 2004 in Aslany 2019). Second, the definition of class on the basis of labour relations could be misleading because in most of the cases, the members of the farming households are involved in many parallels labour relations in addition to the family labour, in both agriculture and outside agriculture and this it would require a large amount of detailed data in order to define which role is predominant. For instance, a farmer tenant can hire labourers to work in his fields but also work as a part-time agricultural labourer for others.

Patnaik (1976) addresses this issue estimating a labour exploitation ratio (a ratio of net use of outside labour to family labour days), and on the basis of the ratio value, he identifies five distinct classes: landlords, with a very high labour-exploitation ratio, who do not employ family labour on the farm; rich peasants, with a very high labour exploitation ratio but who employ family labour for the major farm activities; middle peasants, primarily self-employed on their own farms; poor peasants, or net sellers of the labour force, working for others directly or through leasing land and sharecropping and full-time labourers, who do not own or operate any land at all and are entirely dependent on selling their labour force.

Pattenden further distinguishes dominant classes and classes of labourers by looking at labour relations, capital ownership and patterns of investment of surplus (Pattenden 2016). He includes in the category a continuum of positions of the dominant class including not only the net buyers of labour but also those who predominantly produce hiring labour but also work themselves in their fields to produce a surplus. Pattenden sub-divides the domi-

nant class into three different categories: the class of surplus producers, who extract value from the labour force, both in farm and non-farm forms of accumulation; the intermediary class of domination including households whose fields are mainly cultivated by hired labour but they also work in family farms, and a third class consisting of petty capitalists and petty commodity producers who hire labour but occasionally take part themselves in the production (Pattenden 2016).

At the other hand, the labourers defined as "net sellers of labour force who do not produce a surplus" (Pattenden 2016) are further classified in subcategories: a first category of households who are primarily involved in family farm production but also work as agricultural labourers for others, a second category of households who work most of the time for others but they also have a secondary source of income in family farms, and third, landless households who entirely sell their labour force to earn their livelihood. All these three categories are valid for both agricultural and non-agricultural activities (Pattenden 2016).

In alternative to the Marxist framework predominantly used in the categorisations discussed up to this point, we found in Oommen (1984) a singular tentative of categorisation which also consider distinct styles of life, apart from economic criteria, to distinguish different agrarian classes. Oommen (1984) closely scrutinizes the debate on the nature of agrarian classes in India and eventually defines five classes using the Weberian lens of the social status as main view's point on the forms of social distinction in the agrarian society. The five agrarian classes are landlords, rich farmers, middle peasants, poor peasants and landless agricultural labourers. Landlords, who live from rent and other exactions such as forced labour, own but do not cultivate the land. They may live either in the same village where they own land or may be absentee owners. Their style of life is "feudal", they are a leisure class, and their activities are mostly about seeking pleasure (drinking and gambling). Most of them, if not all, are from the traditionally privileged castes such as Brahmins and Rajputs.

The second class, the one rich farmers, is according to Oommen, a product of the Green Revolution who took advantage of the public subsidies. They are not the real tillers of the land for they do not themselves work on the land; they only supervise agricultural operations. They commonly lease in land for cultivation. Their approach to farming is for the market and for making some profit rather than for self-substance. They are capitalist farmers and are drawn from a variety of backgrounds, from retired military officers to the enterprising agricultural graduates. Their style of life approximate that of white-collar employees, they are politically influential and economically well off. The majority of them are drawn from land-owning traditional castes

such as Brahmins or Rajputs but also the most educated of the peasant castes such as Jats, Ahirs, Reddis, Kanmas, Nairs etc.

The third class corresponds to the middle peasants that Oommen distinguish from rich farmers not only on the difference in the size of their holding but primarily on their involvement in the production process. Middle peasants participate in the agricultural operations directly and hire labourers only for certain operations or at certain points in time. Usually they are not educated and their style of lite is rustic in the sense that it approximates the landless families. Most of the middle peasants benefited from the redistributive operations. Oommen says of them they "uneducated and unsophisticated, they usually lack skill in dealing with the developmental bureaucracy" (1984:48). The caste background of the middle peasants is more or less the same as that of rich farmers, but lower castes too fall in this category.

The class of poor peasants is mainly constituted by those who own small holdings and cultivate it by their own labour. Often their holdings are so small that they cannot make ends meet exclusively though the income derived from it and therefore are also labourers. They may also work as share-croppers or tenants of various types. These peasants did not benefit from the public subsidies because the subsidies are monopolised mainly by the first two classes of landlords and rich farmers and because they lack social skills and social capital to "manipulate the bureaucracy" (Oommen 1948:49). Poor peasants are drawn from almost all caste groups, although most of them may be from backward and Dalit castes.

Finally, the landless agricultural labourers, of the fifth class, do not own land. Their sole source of income is their labour power and hence they depend fully on landlords, rich farmers and middle peasants for their livelihood. Most of these labourers belong to Dalit castes who occupy the lowest ritual status in the traditional caste hierarchy.

1.6 Caste, class and social mobility in contemporary India

Bailey distinguished caste from other forms of inequality, formalising the difference between "open" and "closed" systems of stratification (Bailey 1963) and focusing on the social mobility of the individual. A closed system of social stratification is a system where mobility is not possible: inter-caste mobility is not possible. He contrasted the possible change of status in the Western stratification with the "frozen" link between the individual and his

caste in India. But the crucial question was not answered: Why should these links remain "frozen" in Indian system of caste while class have "melted" and reconfigured in the West. For Berreman, the answer is political: caste inequality is sustained by an exercise of power from the dominants over the exploited, which is sometimes violent. In the Marxist view (Mukherjee 1957, 1999), caste is a form of ideological superstructure, hiding universal class relations and enabling the dominant to "divide and rule".

Béteille (1965), who separated caste from class and power, stressed the importance of the "honour" in India, and how it marks the difference between groups as well as status (1965: 45). But he does not explain why India should be different from other class systems in this way. Seen as an ordered system, inequality must be supported by consensual norms or values. Some scholars, like Bailey, Berreman or Barth, however, stressed the difference between a common set of ideas (ideology) and the values that motivate each actor. They speculate that with the advent of the modern society a new hierarchy must be forming around the new middle-class elites, who are more interested in pursuing their individual (economic) profit than to preserve collective norms or ideas, like honour and ritual status. Middle classes are thus expected to get away from their traditional caste's occupation and to experience greater internal mobility.

Despite the existence of a large body of literature on social mobility within Indian society, "UnEven Odds" by sociologist Divya Vaid is the first comprehensive study of the whole country that theoretically questions and quantitatively tests the links between the class of origin and the destination and the caste-class interactions. Vaid (2018) mobilises the National Election Studies (NES) produced by the Center for the Study of Developing Societies which allow her to run an analysis by cohorts of birth and to compare 2004, 2009 and 2014. Previous studies have largely adopted a more localised approach, focusing on specific areas (Chaudhuri 1987), mostly urban areas, or certain castes (Chekki 1970).

Viad study confirms, at large, the thesis of the "stickiness" (inter-generational class stability). The association between the class of origin and the class of destination is strong and even stronger for top classes and for women compared to men. Urban India appears more fluid than rural India, where the agricultural workforce is almost immobile. Viad also finds that there is a little crossover between manual and non-manual occupations over generations. We find similar conclusions in Motiram and Singh (2012): using data from the India Human Development Survey 2005 they show that a substantial proportion of low-skilled and low-paid workers' sons remained in the same occupations as their fathers. However, this study was limited to a cross-sectional analysis of intergenerational mobility, using data collected in

2004–05. Azam (2013) who also used the same dataset finds that mobility in the 1975–84 birth cohort was higher than mobility in the 1945–54 birth cohort. Reddy (2015), using data from the National Sample Surveys from 1983 to 2012 confirms that there is a decline in intergenerational occupational mobility in India.

Further, Viad identifies a congruence between caste and class: higher castes are more often clustered in higher classes, whereas Scheduled Castes are more commonly associated with manual work and low agricultural positions. Overall the caste-class congruence diminishes among younger birth cohorts, but it remains present. Upward intergenerational mobility is less among scheduled castes, while downward mobility is likely to happen even among upper castes. However, the effect of class origins appears to be far more critical than the caste effects when the probability of belonging to a professional class is measured on the basis of the of class of origin and the caste.

The study of the class-caste association in terms of social mobility has some limitations in Viad's contribution: the author does not look at the mobility between castes, but only between classes controlling for castes. The mobility between castes require more than just information on groups of castes, but detailed information on everyone's *jati* or sub-caste affiliation and their hereditary and current occupation, but the author uses administrative groups as proxy of castes. She distinguishes High Castes from Other Backward Classes, Scheduled Castes and Tribal Castes, and finally a group for Muslims and one for other minorities. Groups benefiting from reservation quotas are often mobilised to operationalise caste because it is the only source of information about caste in the surveys (Desai and Dubey 2012, Ferry, Naudet, and Roueff 2018), but it is an imperfect proxy for the proper endogamous and ascribed group which is the *jati*.

Similarly, Motiram and Singh (2012), Hnatkovska et al. (2013) and Reddy (2015), argue that disparities of intergenerational mobility persist across the caste groups, but they only use administrative groups. The problem in using this formalisation of the caste scheme is that the reservation groups have been defined based on their level of socio-economic deprivation, merging de facto concepts of class, status, prestige, and economic situation, and so overlapping the caste and the class dimension. However, caste and class are not a continuum, and one form of stratification does not preclude another. Caste corresponds to an extreme form of status where rituals guarantee the distinction; this does not mean that caste does not affect material well-being, but whereas class affects it directly through the market, "status affects material well-being indirectly, through the ways that categories of social honour underwrite various coercive mechanisms" (Saunders 1990). To estimate the

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caste effect on the class attainment, caste and class should be clearly distinguished by using the proper category of *jati* instead of broad administrative groups which are very heterogeneous in terms of *jati* (this is mainly the case for Other Backward Class). Of course, problems of sample size arise when we keep the *jati* disaggregated; just as class categories require conceptual justification for their operationalisation, the same should be for caste, but it is not the case in previous studies.

1.7 Conclusion

In the sociological tradition, the question of the social mobility has been central since Sorokin's seminal work in the 1920. The studies of the stratification systems, their forms and processes, provided evidence of the social origin, defined as the class of the father (or the mother), being a crucial factor of socio-economic inequalities in all the societies. Trends and patterns of social mobility in Western industrial societies have been mainly studied through the lens of the modernisation thesis (Kerr, Dunlop, Harbison and Mayers 1960, Blau and Duncan 1967, Treiman 1970, Ganzeboom, Luijkx, and Treiman 1989, and others) which claim that the structural transformations of the economy led to profound changes in the shape of the distribution of socially valued and scarce resources in a population, for instance, education, income and occupation. As a consequence of the structural transformations, the process of stratification, or the principles by which individuals, or groups of individuals, are distributed over different positions in the stratification structure, is supposed to change significantly. Indeed, one of the major arguments of the modernisation theory is an increasing movement away from occupational inheritance (Treiman 1970). While some (Ganzeboom, Luijkx and Treiman, 1989) found support for this hypothesis, others (Featherman, Jones and Hauser 1975, Erikson and Goldthorpe 1987, 1992, Breen and Goldthorpe 1997, Breen and Breen 2004) found only limited changes in social fluidity patterns and thus take a nuanced stand and argue that the hypothesis of modernisation increasing opportunities of social mobility only concerns the absolute rate of mobility but does not entail a corresponding social fluidity mobility (i.e. social mobility net of the structural effects).

The dominant view in the literature on social mobility in industrialised societies is that inter-generational mobility, or social fluidity, is either constant or trendless: Shavit and Blossfeld (1993) show, through a scrutiny of a collection of studies, that the influence of class origins on children's educational attainment did not decline over the 20th century in thirteen developed nations. Evans (2000) shows that class voting has only declined in Scandi-

navia, but in Germany, France and elsewhere it is inaccurate to talk about a general decline of class voting because there is evidence of the contrary. Breen and Goldthorpe (2001) have shown, more recently, that the long-term temporal stability in patterns of social mobility in Europe reported by Erikson and Goldthorpe (1992) hold true in Britain at the end of the 20th century: "there has been no change in the extent to which class origins help share class destination" (Breen 2005:54). As opposed to this view, some scholars provide evidence of increasing social mobility over time, albeit limited (Breen and Jonsson 2007; Featherman and Hauser 1978; Grusky 1986; Hout 1988; Vallet 2001), while others claim that social mobility has started to decline in modern societies (Long and Ferrie 2003).

While much social stratification research has been and still is carried out in Western countries, this thesis aims at contributing to the emerging literature concerning social stratification and mobility in India. Intergenerational social mobility is a new field of social investigation among Indian sociologists but still limited by the lack of suitable data. Moreover, the interaction of caste with the effects of the class of origin can be only captured with a disaggregated analysis of the jati, but this information is not available in large scale dataset from national surveys. Using unique data on the full population of Palanpur, a village in Uttar Pradesh, surveyed seven times from 1958 to 2015, we provide a longitudinal analysis, at the individual level, of the trends, the patterns and the determinants of the social mobility over three generations of individuals and the effects of the interaction between jati and class of origin on the access to opportunities for upward social mobility. The analysis is based on a combination of standard statistical methods of social mobility studies with qualitative analysis of a collection of more than a hundred interviews carried during in-depth fieldwork.

Chapter 2

The case study of Palanpur

2.1 Introduction

The idea of focusing on a case study as the lens to understand the ongoing transformations of the economic and the social structures of a vast country like India is not new. A long tradition of "village studies" flourished in India since the beginning of the 20th century. The pioneering works of Gilbert Slater are mainly remembered for having preceded a long series of ethnographic researches on villages from all over the country. Srinivas (1963) and Dube (1955) are considered among the principal father founders of the Indian sociology and anthropology because of their notable contribution of several in-depth village studies. Among others, Bailey (1957) studied Bisipara village in Orissa, Epstein (1962) studied Wangala and Dalena in Kernata, Hopper (1965) studied Senapur in Uttar Pradesh and many more. Not only in India but also in North America and Europe, a tradition of "community studies" arose from the 1950s to the 1970s.

These community studies emerged with the intent of focusing on a locality the socio-economic transformations related to the process of industrialization: its effects, its contradictions and the different paths of transformations. Indeed, issues of urbanization, industrialization, social exclusion and integration of pre-industrial society with the modern economy have been central to the research queries that framed community studies in western societies. In particular, the central question of these studies was aimed at understanding how the social structures and social relations were reconfiguring at the local level. The modes of conflict, the relationships between labourers, the forms of cooperation, the formation of the class consciousness, the inclusive sense of social solidarity, the conditions of trust, and more generally the relational dimensions and the cultural norms were objects typical of community studies

(Tosi and Vitale, 2016).

One of the advantages of studying a village or a community, rather than a sample of the population, is that it allows closer observation of the social relations between individuals, households and groups of individuals. The closeness to the inhabitants offers insights on the local institutions, the individual behaviours and the social processes and guarantees a high quality of the information collected, through the day-to-day collection of data, triangulation, cross-checking and participant observation. Indeed, these kinds of field-level studies facilitate the combination of complementary methodologies and the integration of the deductive approach with the inductive one. The ethnographic approach coupled with the systematic surveys of the population allows a continuous back and forth from the empirical evidence to the theory, which helps to formulate relevant research questions, consistent hypothesis and to provide a meaningful interpretation of the results.

However, with the diffusion of extensive national surveys and the progression of the quantitative approach in the sociological discipline, the village and community studies have been hugely criticized for their inability to provide comparable and representative results. From the late 1970s, the sociologists concerned with issues of social stratification and social mobility, have started to pay more attention to international comparisons rather than the micro case studies.

The major disadvantage of focusing on a single village is that it is not possible to generalize the findings. Despite the in-depth knowledge and the robustness of the data collected in a village, it is impossible to know whether what one observes holds for other communities. The comparisons with other case studies from the literature are helpful but limited, precisely because of the particularism of each case study. In a country like India, the huge regional variations, in terms of social norms, economic development and local institutions do not allow a direct comparison of the social structures and the systems of social relations.

However, in recent years there has been a revival interest for the village studies in India. Many social scientists look at these studies as an opportunity to observe the changes and the transformations occurred over a long period. The fact that a large number of village studies have been carried out until the Independence of India and soon after, it allows undertaking resurveys to measure the change over time. The object of these studies has varied along with the different phases of the structural transformations. After the Independence of India (1947), social scientists were mainly interested in the effects of the land reforms and the Green Revolution. The village became the predilected site of observation for agrarian economists who wanted to measure the productivity of the agriculture. The sociologists and the an-

thropologists were more interested in the effects of the quota policies for the advancement of the backward castes, the formation of the social classes, and the evolution of the household model. Although most of these studies were exclusively qualitative and limited to a specific point of time, they constitute a prominent body of research in the current stream of development studies. Indeed, they contributed to compensate with the lack of detailed information in the available large-scale data sources such as the socio-economic surveys of the National Sample Survey Office (NSSO), the Census of India and the Indian Human Development Surveys (IHDS) on institutional contexts and processes of change.

The research questions of this thesis required a follow up of households and individuals over a retrospective period of time, long enough to cover several generations and a sample of population allowing to trace all the genealogical links between individuals and households. No dataset at the national level or even regional level containing this essential information was available in India. Moreover, most of the existing quantitative studies on caste in India use aggregated categories of sub-caste based on similar socioeconomic criteria which do not account for the specific endogamous groups based on the caste identity.

This thesis is based on the case study of Palanpur, a north Indian village whose population has been surveyed seven times from 1958 to 2015. A critical feature of the data available in Palanpur is the possibility to disaggregate the four-fold administrative caste scheme (i.e. General caste, Other backward class, Scheduled castes, Scheduled tribes) which is used by the Census and the National Sample Survey. We use the original jati classification that is the most relevant sociological unit to study the caste segmentation since it constitutes the effective endogamous social groupings. Moreover, in the case of Palanpur, we have access to detailed information at the individual and household level of land, occupation, education and other socio-demographic characteristics, which makes this dataset almost unique in India. The period spanned by the study covers a series of fundamental changes, from the land reforms (Zamindari Abolition Act of 1951) after the Independence (1947), to the Green Revolution of the 1960s and 1970s, the increasing integration of the village with urban markets and the diversification of the sources of livelihoods out of farming.

This thesis is, to our knowledge, the first attempt to develop a longitudinal analysis of the social mobility over six decades, combining quantitative analysis of surveys data on the whole population of a village with an ethnographic approach and qualitative analysis of a large body of semi-structured interviews.

2.2 Why Palanpur? Context and motivations

Palanpur is a small village of somewhat above 1200 inhabitants in 2015 (in 1958 there were 528), located in Bilari block of Moradabad district in the region of Uttar Pradesh (see Figure 2.1). According to official records in 2011, the village covers an area of 196 hectares, out of which 161 hectares are used for cultivation. Palanpur lies thirteen kilometres to the north of Chandausi (a small town with population 110.000 in 2011) and thirty-one kilometres to the south of Moradabad (a city with population 4.770.000 in 2011).¹



Figure 2.1: Map of Uttar Pradesh

Notes. The arrow indicates the Moradabad district where Palanpur is located.

The proximity to these urban poles has been of particular importance for the diffusion of new sectors of non-farm occupations among the population of

¹For more details on the location and the region characteristics see Bliss and Stern (1982) and Lanjouw and Stern (1998).

Palanpur and the emergence of new patterns of spatial mobility. The village is connected with these towns by roads as well as by the railway line (the station "Jargaon" is at the outskirt of the village) which is also regularly used to travel to Delhi, 200 kilometres far from Palanpur. The railway line has been present in the village since the earliest survey in the 1950s, and, with no doubts, it has played an essential role for the connectivity of the village with the outside world and the integration of the population with outside markets.

Palanpur has been the subject of regular and in-depth questionnaire surveys, conducted by economists and social scientists over the last seven decades. The first survey available on the full population of Palanpur was carried out by the Agricultural Economics Research Centre (AERC) of the University of Delhi in 1957-58, who replicated a second wave six years later in 1963. Ten years later Bliss and Stern, driven by the motivation of observing the effects of the green revolution for the local economy identified Palanpur as the most suitable village to conduct a survey. The criteria they used for their choice were: the availability of two previous surveys, the possibility to live in the village for the duration of the survey, the proximity to Delhi, the large share of tenancy and wheat cultivation (two aspects of importance for the analysis of the green revolution) and the fact that there was nothing particularly unusual about this village in comparison with other villages.

In 1984 Jean Dreze, Naresh Sharma and Peter Lanjouw joined the Palanpur "community" for the fourth and the fifth waves. Jean Dreze and Naresh Sharma involvement were crucial in that they resided in the village for more than a year and collected a large amount of qualitative data, in addition to the quantitative ones. The last two waves, in 2008-2009 and 2015, were led by Himanshu. In Palanpur, the data recordings are all traceable from hard copies and scans of the questionnaires for the last waves of survey and all the master dataset with original data cleaning are available and partly annotated. This aspect was essential for choosing this case study. Indeed, the major methodological and measurement issue of longitudinal surveys conducted by different people over a long period of time is to trace back the methods and the criteria of codification used to organize the data.

To our knowledge, Palanpur is the most extended longitudinal case study with updated data in India which cover a series of fundamental changes, from the land reforms (Zamindari Abolition Act) after the Independence (1947), to the Green Revolution of the 1960s and 1970s, the neo-liberal reforms of the 1990s and the increasing integration of the village population within urban markets over the last three decades. The quantity of data and the quality of the survey designs make this case study a unique opportunity to study intergenerational social mobility and constitutes the first motivation

for choosing this case study.

Indeed, longitudinal surveys tracking households and individuals over time provide the best data to test the effects of social origins on social destinations. In the absence of longitudinal data, cross-sectional surveys are often used as a source of data for social mobility studies, but they must contain information on the socio-economic position of the respondents as well as on the socio-economic positions of their parents when they were growing up (ideally when they themselves were aged 14). While the information is collected at only one point in time, the measures still contain a temporal dimension and can inform analyses of intergenerational mobility. Cross-sectional surveys can also be repeated at different points on time but, contrarily of panels, on a different sample of the population each time. If there are numerous large-scale repeated cross-sectional surveys in western countries, such kind of surveys are barely available in India, moreover quality and consistency issue in large-scale cross-sectional surveys often raises concerns about data reliability. In fact, both income and occupational status, used respectively to study economic mobility and social mobility, are difficult to estimate reliably in many developing countries. In contexts where a very large share of the population is engaged in agriculture, and where the informal sector provides the bulk of non-farm employment, measuring income with precision is a very difficult undertaking because earning is not regular and formally accounted. Moreover, classifying occupation status is not easy in situations where the pluri-activity is very common, and employment is not formally regulated. With retrospective information measures, the individual's ability to recollect and reliably report on their parents' socio-economic characteristics are even more so limited. In Palanpur, the same individuals have been repeatedly surveyed, at different points of time and hence, there is no need to rely on retrospective information. We can directly compare information collected among different generations of respondents at different points of time. In other words, we can compare the occupation of an individual collected when he was 20 years old with the occupation of his father surveyed say 40 years earlier when he had the same age of his son 40 years later. For this reason, Palanpur appears as an excellent case study for intergenerational analysis.

Another important reason for choosing Palanpur is the possibility to disaggregate the caste at the *jati* level. All the social mobility studies at the national level use the broad administrative categories Upper Caste, Other Backward Classes, Scheduled Castes and Scheduled Tribes are usually used to proxy the *jati* effect. In fact, since the last colonial census of 1931, the Indian statistical administration no longer considers the *jati* membership to describe the social properties of individuals and households. This lack of statistical data available to social scientists contrasts with the literature

emphasizing the salience of caste in the Indian social structure (Ferry 2019).

Undoubtedly, the only possible way to study castes at the national level would be to group *jatis* which are homogeneous at some level and generalizable for the whole country. In India there are perhaps more than 3,000 jatis and there is no one all-Indian system of jati ranking in order of status. The jati hierarchies can even change from region to region, indeed it would be impossible to try to define such a universal system of ranking. However, the problem of using the administrative categories to study the influence of caste on social mobility or the class inequalities within caste is that the criteria of aggregation are precisely based on aspects which relate to the social stratification. Except for scheduled castes and scheduled tribes who are scheduled because they were previously considered untouchable, other groups are defined on the basis of homogenous socio-economic characteristics among groups of jati. The category of other backward classes is continuously updated because some jatis highly ranked in ritual terms claim their rights for reservations quotas because of the pauperisation they are going throughout. Using these categories to study the congruence between caste and class and the caste mobility has two consequences: the simplification but also the distortion of the reality.

In our analysis, we use *jati* as unit of analysis. This thesis is, to our knowledge, the first quantitative study of social mobility using the most disaggregated unit of analysis for caste.

Finally, during the whole survey period, Palanpur has always been embedded in a broader context and, especially since the 1970s and the 1980s, the significant changes in the economics, political and institutional spheres have been evolving with the increased connectivity of the village with the surrounding urban areas. Roads development, diffusion of means of transport (i.e. public buses) and other infrastructures, and the diffusion of technology like internet and mobile phones have had a significant impact on the lives of the villagers, especially with the spread of the labour circulation and the emergence of a mood of life always "on" and "off" from the village and "on" and "off" from agriculture. It appeared that there was an urgent necessity to look at these changes from another perspective than only from the village's one and to give an account of the modes of integration of the villagers with outside markets and the interrelation between endogenous and exogenous factors influencing the social transformations.

2.3 Methodology

The thesis draws on a combination of pre-existing survey data and qualitative data collected through an in-depth fieldwork of six months in Palanpur and shorter fieldworks among migrants in Punjab, Himachal Pradesh and Haryana. In total we carried 102 semi-structured interviews, fully recorded and transcribed, which constitute the bulk of the qualitative analysis.

We developed an original and inclusive method to analyse both qualitative and quantitative data combining the standard statistical and econometric methods of social mobility studies with the analysis of the interviews and the contextual elements collected during fieldwork. The quantitative analysis aims at measuring trends and patterns of association over time, while the qualitative analysis describe the processes underlying the trends measured quantitatively: the coping strategies and decision-making processes, the subjective perceptions, the personal aspirations and the effects of stigma and reputation, underlying trends and patterns of social mobility.

The two methods are not sequentially combined where one method is used to confirm the results obtained with the other method (i.e. confirmative and explanatory approaches). Instead, we applied a triangulation design: the qualitative and the quantitative approaches interact at the level of the theoretical framework and the definition of the research questions as well as in the analysis of the results. First, the research questions and the broad hypothesis have been inductively defined on the basis of the survey data and the ethnographic information collected during fieldwork. Second, we theoretically framed the research questions and further clarified specific hypothesis using a deductive approach.

2.3.1 The fieldwork²

We visited Palanpur several times for short explorative fieldworks, before starting the PhD, for the Master's dissertation and as research assistant in the project "Palanpur: India's economic revolution: a perspective from six decades of economic development in a north Indian village". The first visit was in 2013, before the last survey was conducted. We spent only ten days with the assistants of the survey. In 2015, we visited Palanpur for one month of explorative fieldwork. We were based in Moradabad, and we commuted every day to Palanpur. We carried twenty-three explorative interviews in Palanpur and in the trains with commuters and individuals having experienced migration, plus twelve interviews with migrants living in surrounding

²Some selected pictures of the fieldwork are reported in section A.7 in the Appendix.

areas. The contextual elements collected through these informal conversations were extremely informative and they contributed to the definition of some of the research questions. After this first exploration, we defined the research project and we took classes in Hindi language to acquire enough autonomy to conduct a proper ethnography.

Finally, in 2018, we did an extensive fieldwork from January to May, with the help of a field-mate who regularly visited the village. The presence of the field-mate was essential to ensure our security. Indeed, it is extremely unusual for women to travel alone in rural India and the regular visits of a male colleague contributed to avoid running into unpleasant situations, especially at the beginning of the fieldwork. Moreover, despite the consistent progress we made with the oral speaking ability in the local language, the help of our field-mate was crucial for the conduction of the interviews and the rigorous translation from Hindi to English and vice versa.

The period of the fieldwork, was highly favorable to our research because it corresponds to the marriage season in Palanpur, moreover Holi festival is celebrated on 2nd of March. The majority of migrants use to come back to the village to attend these festivals. Hence, our chances to meet and interview a consistent share of migrants in Palanpur were optimised.

The accommodation and food were provided by a local family who hosted us. When we reached Palanpur, thanks to our previous visits, we received several offers of hospitality. The criteria we followed to choose the family with whom to stay are the following. First, they should not be implicated in the political life of the village (Pradhan³ and Gram Panchayat⁴). Second, they should not belong to the two extreme poles of the caste hierarchy to avoid issues of stigma and rejection from members of the opposite pole. Third, their house should not be in the heart of the village but slightly aside to give us more freedom of movements and autonomy. Fourth, the family should enjoy from a good reputation in the village and should not be involved in any serious conflicts situation. Fifth, they should have latrines in their house and finally, they should not expect any salary in exchange of hospitality to avoid rivalries with the neighborhoods. Of course, we contributed weekly buying vegetables and rice and, at the end of the fieldwork we donated a consistent financial contribution for their hospitality.

We spent the first days exploring and observing the village. We met the contacts we previously consolidated and we introduced ourselves to the local authorities and institutions (*Pradhan*, *Sarpanch* and other members of

³Ministerial title of village "chief" (per official election every 5 years).

⁴Village council: local self-governance institution at the grassroot-level of the village and small-town, a sarpanch is elected as its head every 5 years.

the *Gram Panchayat*, the teacher, the *Anganwadi* and *ASHA* workers)⁵, we explained the aim of our research and attended several marriages. From the second week of fieldwork onward we dedicated the largest part of our time to carry interviews.

2.3.2 The interviews

In total, we carried out 102 semi-structured interviews based on a detailed guideline covering several topics relevant for our research questions (see section A.1 in the Appendix). We interviewed male and women from different jati and age groups (see Table 2.1). The guideline has been tested and improved in a first dozen of explorative interviews. The majority of the interviews were carried out among residents in Palanpur. We also visited different groups of migrants from Palanpur, in their actual work and living place in Punjab, Haryana and Himachal Pradesh. We stayed with them and carried interviews with different members of their households. In addition, we also interviewed contractors, recruitment agencies, and owners at their workplaces. The majority of the interviews have been fully recorded and transcribed before being analysed. Each interview lasts in average 120 minutes and we generally used to carry two interviews per day. At the end of each interview we filled a printed form with the socio-demographic data, some notes on the respondent profile and his/her family members, the description of the context and the conditions of the interview, specific instructions for the transcription, methodological comments and other remarks. Apart from the form we tried to not take many notes during the interview in order to keep the flow and to limit the sources of distractions and interruptions. In some of our previous experiences, we had noticed that taking notes might be a source of pressure for the respondents who might feel not comfortable, especially for those persons who are illiterate. The recorder we used was very small, we always asked permission to use it at the beginning of the interview, and then we put it in our pocket, so then the respondents forgot about it.

Every day we uploaded the recording and transcribed in a word document the content of the forms plus additional elements from the context we stored in our mind and personal observations of the respondent behaviors. Once a week we used to make a back-up of the materials in an external memory device. Interviews were mainly individuals but talking to a single individual

⁵Accredited social health activists (ASHAs) instituted by the government of India's Ministry of Health and Family Welfare (MoHFW) as part of the National Rural Health Mission (NRHM). Anganwadi workers (AWW) is a type of rural mother and child care centre in India, instituted by the government as part of the Integrated Child Development Services program to combat child hunger and malnutrition.

Gender	Female	Men			
%	25.5	74.5			
Religion	Hindu	Muslim			
%	71.6	28.4			
Jati	Thakur	Moria	Jatav	Teli	Other
%	23.5	33.3	21.6	5.9	15.7
Age cohort	15 - 24	25 - 45	45 - 65	65+	
%	29.4	41.2	25.5	3.9	
Locality	Palanpur	Migrants			
%	77.5	22.5			

Table 2.1: Profile of the respondents to the interviews

Notes. Total interviewed (N) = 102

away from other's curiosity was not always an easy task, therefore very often the individual interview evolved in a collective interview (i.e. husband and wife, father and son).

Our fieldwork was also partly dedicated to following some groups of workers on their workplace, observing and interviewing them at work in order to collect the maximum details concerning all the aspects of their occupation. We followed for several days a group of porters from Palanpur working in a storehouse in Chandausi, a city close to Palanpur. We visited the brick-kiln in Sirsi, located at six kilometers from Palanpur where we followed a group of young males from Palanpur and we interviewed the contractors and the owner.

In addition to the semi-structured interviews, we also kept a daily diary where we described contextual elements, observations related to facts and events happening during the day, the villagers daily routine, the social dynamics, the difficulties we faced, and all and side information we collected from informal conversations. Finally, we conducted a genealogical survey in Palanpur aimed to assess the intergenerational links between households and individuals that were missing in the previous dataset (for more details about the methodology see section A.2 in the Appendix). Part of the information was available in the previous surveys data, but there were a lot of missing information and discrepancies. Filling this gap was essential for the analysis of the social mobility; therefore, we collected the genealogical tree for three

generations of more than hundred households in Palanpur with retrospective interviews carried during the fieldwork in 2018.

2.3.3 The survey data and the sample

The surveys have been conducted in 1958, 1963-1964, 1974-1975, 1983-1984, 1993, 2008-2009 and 2015. In the Table 2.2 we summarise the total population from one survey to the next. Consider that every individual surveyed in a survey round is tracked in the subsequent survey and is assigned one of the four status: i) inside village, if the surveyed individual is surveyed again in the village in the next round, ii) married out, for women who move out of the village after marriage, 3) migrated out, if the individual is alive but is staying away from the village for a period longer than three months and 4) dead, if the individual dies between the two survey rounds.

The changes in the population between survey years are due to various reasons: death, migration out (for marriage or other reasons), in-migration. Throughout the whole period, Palanpur has witnessed a constant demographic expansion, from 510 inhabitants in 1958 to 1243 in 2015. In-migration is extremely rare in Palanpur; therefore, the expansion of the population is only due to the natural growth rate. In contrast, the annual migration rate per 1,000 population has increased from around 4 in the first two decades to 6-7 in the next two decades but has increased to 10 in the last decade. In-migration concerns a negligible minority. For each survey year we used data at the most disaggregated level, we harmonized waves of data, recoded the variables and cross-checked with dataset obtained by previous researchers on Palanpur. We used an individual panel id (pre-defined) to merge all the dataset, and we obtained a panel covering the full village population, including migrants (threated in a separate dataset). This panel includes data at the individual level and household level over time covering demographics, education, occupation, migration, consumptions, income, credits, durables, health and social protection. The panel accounts in total for about 3,000 observations.

The most substantial operation of recodification for our analysis consists in the occupation variable: starting from the most detailed information on different aspects of work at the individual level (nature of the job, regularity, income, place of working, hiring/hiring out information) we define two variables, a broad classification of occupation, and an aggregated level. Defining comparable and pertinent categories of occupation for the whole survey period was one of the biggest challenges We faced in the treatment of the longitudinal data. As Harriss (2012) points out in his methodological considerations on Slater's Village Studies, the way respondents answer

Table 2.2: Population across surveys (frequencies)

Wave	Gender	Resident	Married out	Migrated out	Dead	Total	Annual migration
1958-63	Male	240	0	9	25	274	5.5
	Female	189	16	1	30	236	0.7
	Total	429	16	10	55	510	3.3
1964-75	Male	240	0	12	39	291	3.7
	Female	141	48	13	38	240	4.9
	Total	381	48	25	77	531	4.3
1975-84	Male	333	0	19	40	392	5.4
	Female	240	49	12	34	335	4
	Total	573	49	31	74	727	4.7
1984-93	Male	383	0	43	48	474	9.1
	Female	293	98	19	39	449	4.2
	Total	676	98	62	87	923	6.7
1993-09	Male	362	0	74	79	517	8.9
	Female	240	132	20	47	437	2.9
	Total	602	132	94	126	954	6.2
2009-15	Male	553	0	72	24	649	15.8
	Female	494	63	17	20	594	4.1
	Total	1047	63	89	44	1243	10.2

Notes. Annual migration: total number per 1,000 inhabitants

questions about their employment and the way questions are framed tend to conceal complexity through such blanket categories as "agricultural labourer" or "casual labourer", whose meaning is ambiguous and context-dependent. He insists on the need for much more detailed studies of the employment patterns to being able to compare with comparably constructed datasets from previous surveys. At the other hand, longitudinal studies need aggregated categories to be compared over time, therefore, it is essential to define the optimal level of aggregation depending on the kind of data available and their quality.

The difficulty of comparing codified variables in longitudinal studies is that original classifications force comparisons constrained by the parameters chosen for that classifications, at the time of the survey, and those parameters tend to be reproduced in subsequent surveys, and assumed for being the best way to codify the reality but the reasoning behind might get lost from one survey to the next. Indeed, the problem We dealt with was "how to compare data on the long run, since data are constructed by categories which are not immutable in reality, but strictly embedded in a specific time-cultural context?".

During the seven decades covered by the survey in Palanpur, the occupational structure has dramatically changed, not only in terms of structural transformation of the economy at large but also in the nature of the work itself, and the relative scale of prestige that locals give to old and new occupations.

For this reason, we choose to build the categories for this analysis upon a close scrutiny of the raw information the notes taken by the interviewers, the help files tracing the history of the codification, the recorded notes about the design of the questionnaires, the questionnaire itself, the notes about the data entry and cleaning. Beyond this "archaeology" of the dataset, We frequently called assistants of previous surveys who contributed in the collection of data, data cleaning and data coding to ask for clarifications. We confronted the information collected in the literature with the descriptions provided in previous publications on Palanpur and finally, we used the contextual elements we collected in the interviews and during the fieldwork to define relevant criteria of classification for the local context. From the systematic description of the work tasks, the kind of contracts, the system of payment, the conditions of access and training, the internal organization, the skills level, the employer-labourer relations, we could identify recurrent patterns of association, from which We selected the criteria to use for the final classification of occupation and classes.

The analysis focuses on the working adult male population (aged minimum 15) (see Table 2.3). Adults being primarily involved in study and not

having declared any working activity (primary or secondary) are treated separately, while those being involved in study but having declared a working activity are included in the analysis and fall in the class associated to their occupation. We assessed through direct observation and interviews that attendance to school is very low among adult students enrolled in secondary and higher education programs.

In the absence of adequate information on voluntary and involuntary unemployment, we are not able to distinguish unemployment from inactivity, and thus all the persons not involved in any economic or domestic work for more than six months are excluded from the analysis (only 6% of the total population of males aged 15 or above). We do not fix any maximum age limit for two reasons: first, data do not allow to distinguish inactivity due to age from other purposes of inactivity, and second, given the level of informality in the rural economy, there is no retirement age as such for a majority of the working population in villages. The totality of retired public officers we interviewed, declared themselves actively involved in farming activities, at least as supervisors of sharecroppers or agricultural labourers. The norm is that until health conditions allow people to work, there is no such thing as retirement. While information on the main and subsidiary occupations of all members of the family was collected in the questionnaires, no systematic data on occupations of women are available in surveys data. Due to the absence of information, females are excluded from the quantitative analysis, as in most of the studies on social mobility in India. Indeed, the occupations of women accounted in previous surveys fell in the category of domestic and unpaid work. There is evidence in the literature of serious underreporting of the female participation to economic activities in rural area. However, whereas the workforce remains prevalently more masculine, we found evidence with fieldwork that the agricultural labour force becomes more feminine as women take on most tasks than men could not because of the multiplication of non-farm activities which require to migrate or commute. The participation of women in self-cultivation is unfairly considered domestic work by the respondents to the questionnaire because of a reputation bias. Women receiving wages from non-farm work or agricultural labourers are generally negatively stigmatized because of the norms imposed by the dominant castes who prevent women from working outside their house. Among the migrants we interviewed instead, we found that all the women were involved in some economic activities, mainly as masons, maids or factory workers. In Punjab, we also met a woman from Palanpur who became a contractor, which is a position restricted to men generally.

Sinha and Coppoletta 2008 did a women's survey in 2008 and reported some of their findings in a paper which has been included in the last book

Table 2.3: Workstatus of a dult population (15+) by gender and year

Male								
		1958	1963	1975	1984	1993	2009	2015
Working	freq	166	159	194	260	290	338	355
	%	97.1	86.0	88.2	90.0	83.3	85.6	82.6
Domestic Work	freq %	0	0	0	1 0.35	$\frac{2}{0.57}$	0	0
Student	freq	2	6	4	10	30	42	43
	%	1.2	3.2	1.8	3.5	8.6	10.6	10.0
Not working	freq	3	20	22	18	22	15	24
	%	1.8	10.8	10.0	6.2	6.3	3.8	5.6
Missing	freq %	0.0	0.0	0.0	0.0	4 1.2	0.0	8 1.9
Total	freq	171	185	220	289	348	395	430
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Female								
		1958	1963	1975	1984	1993	2009	2015
Working	freq %	8 5.3	10 5.8	0.0	4 1.6	4 1.3	41 10.8	30 7.5
Domestic Work	freq %	139 92.7	145 83.8	165 87.3	245 95.0	302 95.6	282 74.2	331 82.3
Student	freq %	0.0	0.0	1 0.5	0.0	2 0.6	18 4.7	25 6.2
Not working	freq %	3 2.0	18 10.4	23 12.2	9 3.5	6 1.9	39 10.3	15 3.7
Missing	freq %	0.0	0.0	0.0	0.0	2 0.6	0.0	1 0.3
Total	freq %	150 100.0	173 100.0	189 100.0	258 100.0	316 100.0	380 100.0	402 100.0

published on Palanpur (Lanjouw, Himanshu and Stern 2018). According to their estimates of various indicators such as education, age at marriage, occupation and others, with no doubt, there have been many changes in the status of women in Palanpur, but unfortunately the little data available thanks to their contribution do not allow much comparisons over time. Intergenerational mobility of women could not have been possible in Palanpur, even if consistent data were available. In fact, all the women leave the village after marriage and move to her in-laws' village, a part from few exceptions to the customary patrilocal patterns and thus, only information concerning immigrant women could have been collected in the village. Nevertheless, one third of the interviews we carried out during fieldwork are with women. Indeed, their involvement in working activities, their role in the decision-making at the household level, their experiences of migration and their perspective over the social inequalities in the village and the changing social relations, are essential to the understanding of the social mobility in Palanpur. These interviews revealed a lot of extremely rich information concerning the social stratifications, the inter-personal relations in the family, and the caste antagonisms in the village.

2.3.4 Terminology

Land area is expressed either in acre or in bighas. In Palanpur, there are 6.4 bighas in one acre. 1 bigha corresponds to 0.25 hectares. Income is expressed in Indian rupees (INR). The conversion rate to US dollars (USD) in 2018 was approximately equal to: 1 INR = 0.015 USD or 1 USD = 68 INR

We do not adopt any inclusive form of writing (i.e. alternating "he" and "she" to designate persons of unspecified gender) since the largest part of the analysis is based only on the male population of Palanpur for reasons mentioned above. All the names mentioned in the text have been anonymised randomly mixing the list of names of the respondents and using pseudonyms when names are repeated. We make occasional use of Hindi terms in the quotations when these terms are more relevant in the original language. The surveys years in the table are reported as following: 1958, 1963, 1975, 1984, 1993, 2009, 2015.

2.4 The caste schema in Palanpur

Caste is an important category of identification in rural societies. Everywhere in India the village population is classified by caste and it is common for villagers to ask to outsiders "Kinme jaoge?" (Which caste are you visiting?). This question, which stands for "whose member of which community did you come to visit in the village?", highlights the prevalence of the community over the individual in the local context. Moreover, villages are often called by the local population of a given area by the name of the dominant caste, for instance Jat village, Chamar village, Thakur village, etc.

Caste is a generic term referring to the social ordering of endogamous groups. These groups are commonly differentiated at three levels of categorization: the four ritual *varnas*, the four administrative groups of Upper Castes, Other Backward Classes, Scheduled Castes and Scheduled Tribes and the myriads of *jati*, defined as sub-castes.

The population of Uttar Pradesh is divided into numerous castes and sub-castes. Each *jati* is then sub-divided into clans, called gotras. *Gotra* is commonly considered to be equivalent to the concept of clan: the descendants of male lineage, from a common ancestor, form a patrilinear clan. Panini, an ancient Sanskrit philologist, defines gotra as "the progeny (of an ancestor) beginning with the son's son" for at least three generations. The concept of lineage was first developed among Brahmins, and the same system of patrilineal descent was later adopted by other communities but less systematically.

The gotra, contrary to the jati, forms an exogamous unit, with the marriage internal to the gotra being prohibited by the social norm and considered as incest. The gotra membership is of particular importance for marriages among higher Hindus castes. Apart from the gotra, there is another level of distinction called kula. A kula means "expanded family" and relates to lineage and jati. Kula is understood as a kin-group comprising different joint-households who share a common ancestor (Murdock 1949). Gupta (2000) stresses how the original ancestor is often a myth, consensually recognised by the members of a jati or a kula as their common origin, contributing to shape different king-groups. Generally, these groups claim to have elevated origins and thus for a higher status than other groups allow. To Gupta, the particular systemic aspect of caste follows from this symbolic unity (2000: 70).

The interpretation and the norms related to the notion of kinship vary considerably across the communities and the locations. The kin-group could be consanguine or affine consisting of members descending from a common ancestral male or through rules of joint residency or affinity. Sometimes, in

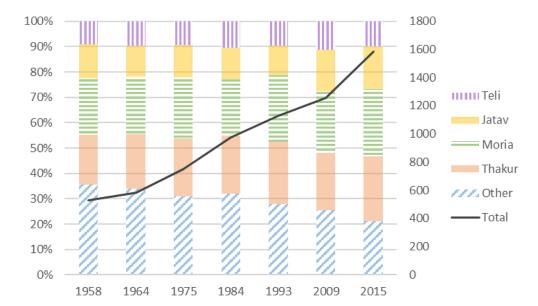


Figure 2.2: Total population and population share

the indigenous perceptions, the two notions overlap, especially in community not assimilated to the *Brahmanical* group (the caste at the top of the ritual hierarchy). The affinal relationship based on the rule of co-residence emerged over time as the lineage from a common descendant grew too large and broke into sublineages through family partitioning (Madan 1989). As a consequence, the descendants of the same kin-group may not trace their relationship genealogically but still preserve a sense of kinship which overcomes the family boundaries. Hence, we define *kula* as kin-group and *gotra* as clan.

In Palanpur there are eight main *jatis*: Thakur, Moria, Dhimar, Gadaria, Dhobi, Teli, Passi and Jatav. All the residuals *jati* have been grouped in all the surveys in the category "Others" and correspond to the *jati* accounting for less than three households. In our analysis, we isolate four *jatis* out of the eight, Thakur, Moria, Jatav and Teli, and we aggregate the others in a single residual category; we obtain a 5-caste groups schema. Thakur, Moria, Jatav and Teli, can be seen, in many respects, as the main players in Palanpur's economy and society and they are representative sections of the rural society of North India. They are the most consistent *jati* in terms of share of the total population all over the period (constant and around 10-20% each) and the most relevant in terms of differential characteristics (see Figure 2.2).

2.5 Description of the jatis

Thakur

There are six *kula* of Thakurs in Palanpur, namely Khateriya, Tomar, Badgujar, Chauhan, Soondmar and Pawar. Khateriya, Tomar and Chauhan are the eldest Thakur residents in Palanpur; the others originally immigrated in the village from outside. Katheriya is considered, traditionally, to be the highest *kula* in terms of intra-caste stratification, standing above Chauan, Bargujar and Tomar respectively. Soondmar and Pawar stand at an equal ritual level and they are both considered at the bottom of the *kula* hierarchy among the Thakur.

The Thakur are included in the upper caste group in the administrative scheme. They were traditionally warriors or soldiers by they often cultivated large parcels of land. In the past they used to be strictly landlords not tilling their land themselves, but this traditional aspect has largely changed in the years, and nowadays they are directly involved in farming activities.

The only normative aspect of Thakur still in place today is the absolute ban imposed on women of working outside their house. Not a single Thakur woman in Palanpur works on the family land. Under the *zamindari system*, the feudal system before the land reforms, the Thakurs constituted the dominant caste in the village since they generally controlled landholdings larger than other castes and most of them were in charge of collecting revenue taxes in the feudatory estate. After the land reforms of the 1950s the tenants of the *zamindar* (who were all Thakurs in Palanpur) became owners of the land that they cultivated, with the consequence that the Thakurs became the caste best endowed with land and still nowadays Thakur, as a group, includes some of the largest landowners of the village. They are reputed for their great attachment to the notion of ijjat (honour), and they claim to have an aversion to manual work.

For marriages among Thakur, the rules differ for grooms and brides. The former is preferred from an upper or equal kula while the latter is preferred from an equal or lower kula. In the past, Thakurs of higher kula did not take food from members of lower Thakurs' kula. Nowadays the kula distinction is less salient, both for marriages and for food, and the identity of Thakur, as a jati, seem to prevail over the kula. However, the vast majority of the Thakur respondents in the interviews we carried in 2018, answer to the question of the caste membership, identifying themselves first with the kula and then with the jati, some others juxtapose the kula name to the jati (e.g. Thakur-Tomar).

Moria

Moria in Palanpur are segmented along four *gotras*: Haldiya, Chakseni; Lakhotiya and Taunk. Haldiya, whose name derives from the term "haldi" (turmenic, a kind of spice grown in India), and literally means "turmenic grower", is considered the highest gotra among the *jati*. Marriages intergotras have always been allowed.

The Moria fall in the category of other backward class (OBC) at the national level and come just right after the Thakur in the local hierarchy. Traditionally they were vegetable growers, but in Palanpur, as far as we know from the data, they are very similar to farmers from other castes in terms of variety of crops cultivated and they are no more given to growing vegetables than others. Like the Thakurs, Moria were also tenants of land during the zamindari and became landowners with the zamindari abolition. Moria emerged in the last decades as the best off farmers in the village, they own the largest amount of land, relative to their numbers. Moreover, Moria is the most numerous jati in the village.

The Moria are known for their strong commitment to hard physical work in agriculture. Self-sufficiency is another crucial aspect of the members of this *jati*; they only consume self-produced food and milk, and they have a strong aversion to borrowing and lending, especially from private sources.

Jatav

There are three gotras of Jatav in Palanpur: Julala, whose traditional occupation is knitting, Jatav-agriculturalists (they have no specific name but constitute a gotra sharing a traditional commitment to agriculture) and Chamar, who were traditionally leather workers.

The Jatav of Palanpur were originally Harijans⁶ or Dalits and in the past, they were considered untouchables. In the case of the Chamars untouchability was also related to the traditional leather's work, because working with dead animals, notably cows, the sacred animal for Hindus, was seen as highly impure. In recent times, the Harijans groups of Palanpur call themselves Jatav, a much more prestigious title implying kinship with the clan of Krishna.⁷

As most of the other *jati* falling in the category of the Scheduled Caste and benefiting from the reservation policy implemented by the Nehruvian

⁶Harijan is a collective term for the outcaste of Indian society. Harijan corresponds also to the category of Dalit and includes the admioniustrative groups of SC (Scheduled Castes) and ST (Scheduled Tribes). For more details see "The system of caste" in Chapter ⁴

⁷For details see Wiser 1971 and Gupta 2000.

government, the Jatav have always been among the most discriminated and backward groups in Palanpur. In the past, those who were involved in farm occupations were almost exclusively agricultural workers and small-scale tenants of the zamindar. After the zamindari abolition, some of them bought land from higher castes exiting agriculture, and nowadays, despite their low status, they do own some land but still less than Moria or Thakur. The Jatav community got involved earlier than others in a good deal of outside non-farm occupations, benefiting from the government policy to favor low castes in public employment.

Teli

Teli is the largest Muslim group in Palanpur, the second is Dhobi, and third, few families belong to the Saifi community. Beyond the caste barrier, in the case of Muslim groups, there is a barrier of religion. In fact, Muslims account for a religious minority in the village; the total Muslims population in the village varied from 10 per cent in the first two surveys to around 15 per cent in 2015. With a similar population size as the Jatav, Muslims have also been at the bottom of the village hierarchy, economically and socially. In terms of religion, the three groups, or *jati*, in the Muslim community form a grouping in the village, separated from the majority of Hindus. For instance, no Muslim participates in the communal village activities like the weekly musical gatherings, although these activities are not restricted to any particular caste or community.

Internally to the Muslim grouping, each jati is separated from the others and the intra-caste marriages are banned. Teli is originally a jati of oil-pressers, but its members have always been also involved in agriculture, despite owning little land compared to others. They lease-in a lot of land. The Teli have grown considerably in number over time and they have also seen changing economic fortunes in recent years with increased movement into self-employed jobs in surrounding urban areas, in particular motorbike repairing mechanics.

2.5.1 The jati relations

Lanjouw and Stern (1998) argue that the inter-jati relations in Palanpur have changed considerably over time. One of the examples they use to illustrate this trend is that restrictions of association and commensality have become less stringent; indeed, nowadays Thakurs and lower jati can step in each

⁸Dhobi and Saifi are included in the category "Other".

other's houses and accept food from each other, but this was not the case in the past. Moreover, episodes of physical violence and labour extorsion against Jatav have almost disappeared, and untouchability is no more regarded as a norm.

As Srinivas pointed out, "the ban on contact between castes and the solidarity of sub-caste express themselves in the spatial segregation of castes" (1969:268). The residential sorting of various caste groups has been described as a pervading factor in rural India (Srinivas 1960, Beteille 1965, Mandlebaum 1970, Sinha 1990, Kochar et al 2006). Indeed, a village layout is not a random agglomeration of houses and the key to understanding the spatial order of the village lies in its social order. There is a logic in the distribution of neighborhoods as the social structure is reified in space and this reification in space adds to the social stability.

There is evidence, in early village studies, of the centre-periphery distribution of caste groups following a recurrent pattern of the highest castes living at the centre and the lowest in the fringe of the village (Sinha 1990). The lowest caste was usually segregated on the outskirt of the village in order to avoid any contacts with the others. With the increase of the social interactions and the smoothing of ancient ritual norms avoiding contacts with lower castes, as witnessed in previous studies in Palanpur, one would expect the impact of caste and kinship on the settlement patterns to get diluted. However, if we look at the location of the households in Palanpur (Figure 2.3) it appears that the residential distribution in 2018 was still clustered by caste.

The map shows the exact position of all the houses in Palanpur occupied by the households of the four main *jati* of our interest: Moria (orange square), Teli (green circle), Thakur (red star) and Jatav (blue cross). We collected this spatial information during the fieldwork in 2018 using a device of offline GPS tracker. We pinned each house and attributed a *jati* label. Each point of interest was automatically geo-localised on a satellite map and later we processed the information on QGIS to design this map.

Unfortunately, we do not have spatial data from past surveys to make a comparison in time, but we found descriptive elements in previous books and notes on Palanpur suggesting that Jatavs' houses were all settled around the pond's area and relatively distant from the centre of the village.

Assuming that the division of caste groups in neighborhoods, hamlets or streets results in a clear reflection of the social structure of the village, we can observe from the map that the Jatavs are the most segregated in the village. They live all grouped in a single cluster of crowded and insalubrious mud houses on the edge of the village, close to the water pond. In the past, the sewage from the entire village was drained into the common open pond, so we can guess the ritual reasons of higher castes for not living close to it.

Legend

Moria

Teli

Thakur

Jatav

Railway Station

Figure 2.3: Spatial distribution of households by jati in Palanpur in 2018

Notes. Author's elaboration.

Moria's families are settled in two different blocks. In the first block on the northern part of the village, all the houses referenced in the map belong to two kin-groups, while all the other families live on the southern block. The spatial division of the Moria reflects the social distance existing between the group living in the first block with the other households. Among the group of the first block, networks are very active. In fact, at the time of the fieldwork, many members of this group migrated to the same place in Punjab where they live together for the working season (we visited them), but no one from the households living in the second block migrated with them. Thakurs are mostly concentrated in the centre of the village and close to the railway station where the economic activity is higher (they own three grocery shops located along the railway line).

Compare to the others, the Telis, who are less numerous in numbers (11% of the total population in 2015), are more dispersed in the village. Some of them live close to the Jatav's area and some others close to the railway station. The railway line forms a symbolic boundary of the village; the only reason for the villagers to cross that line is the weekly haat, the vegetable market happening on Wednesday, The few families who live beyond the railway line are the ones who, for some reasons, have been isolated from the rest of the village community. For instance, there is a household of Tkakur composed by a divorced woman who came back from her ex-husband's village, after the divorce, to live with her two daughters and her son. Divorcing is not very common in Palanpur (less than 0.5% of the adult men and women were divorced in 2015), and a woman who divorces she loses her honour and the respect of the community. Another example of a family who moved beyond the line is the case of a Teli household who got involved in serious troubles with the neighbours because of the young daughters flirting with some young boys in the village. The decision to push the family away has been taken by the Panchayat (local self-government council).

"In the map of the village, its history can be read" claims Sinha (1990). Indeed, despite the proliferation of new houses in the village in the last decades, people in Palanpur tend to build their houses close to their kingroup and jati fellows.

The residential morphology reflects the residual forms of social exclusion and discrimination based on caste, which are still active in the village. For the whole duration of our fieldwork, when we were living in Palanpur, we never saw a Jatav sitting on the same *charpoy* (the traditional bed made of ropes and woods commonly used to sit and to slip) of a Thakur; a Thakur

⁹A lot of new houses, made out of bricks, have been built in the last decades in Palanpur since a lot of families build new houses for their sons.

attending a marriage of a Jatav or a Jatav exchanging food with a Thakur. Moreover, the narratives collected in the interviews revealed a widespread negative social stigma associated with the Jatav community, even if it is barely said openly. For instance, when we stressed the respondents, from other *jatis* than Jatav, on the fact that only Jatav work in brick-kilns from Palanpur and we asked them why it is so, they always ended up saying or suggesting that brick-making is a "ganda kam" (dirty job) and so, no one except Jatav, could do this job.

At the same time, it frequently happened in the interviews to hear euphemisms like: "nowadays we are all equal". A metaphor used by several respondents when they were questioned about the caste relations was the following: "If I cut my hand the blood flowing out will be the same of any others". However, in-depth and repeated interviews revealed that the very same persons initially pretending that caste does not matter anymore, systematically contradicted themselves when they were invited to virtually project themselves in practical situations or to describe some anecdotes from the village. In such cases they admitted, for instance, to never accept food from a Jatav, to exclude the option of working in brick-kilns, even in case of a severe shortage of money, and to consider the fact of taking orders or borrowing money from a Jatav as badnami (shame). When we stressed the respondents on their reasons for such restrictions, they visibly started to feel uncomfortable and confused. Most of the time, they ended up by mentioning the Hindu moral and tradition or saying: "It is like this, it has always been like this, since the fathers of my father, and we do not question our religion".

One of the respondent, a Thakur woman, once answered to us saying: "I know it would be better if my son could go to work in brick-kiln because he has no job and he is useless to us, at least in brick-kilns he could earn some money, but it would be a shame for our family, and I still have a daughter to marry (...) The neighbours will talk and spread a bad word against us. The reputation of the family is important, and my family-in-law has a good reputation".

The fact that a Jatav could be the village headman (as it happened in the early 2000s) does not imply that caste is no longer an issue of reputation and social stigma penalizing the lower castes. However, some profound changes have taken place over the survey period with a general improvement in the status of the lower caste. There is evidence of Jatav's socio-economic empowerment, partly related to the access of non-farm occupations as better alternatives than subordinating relations of production in agriculture, and partly because of government credit subsidies, MGNREGA scheme and job reservation. Lanjouw and Stern (1998) argue that the impact of government's subsidies and schemes for the scheduled castes in Palanpur is very

insignificant.

During the five months of fieldwork we spent in Palanpur in 2018 we witnessed the participation of six masons from Palanpur in the renovation of the pond's wall for a total of 15 days of work guaranteed by MGNREGA and a massive operation of toilets constructions in all the houses in need which was financed by the campaign "Swachh Bharat" with again the implication of several MGNREGA labour-days. However, we do not have quantifiable evidence of the impact for the local employment of these schemes. None of the persons that we interviewed had worked more than two days from MGN-REGA during the 90 days preceding the interview. To this respect, some Thakurs complain about the government taking the side of lower castes in the village. An old man, Thakur, said with some grudge, about a Harijan family (of a *jati* different from Jatav) who benefited from some public subsidies to build a house: "They live like the king, the government help them and they are gifted of anything they need". However, it is a matter of fact (supported by evidence) that this family is among the poorest of the village. The head and his wife grow pigs to make a living, and for this reason, they are excluded by the whole community from any forms of contact or interaction.

Growing pigs is seen as a very impure activity; moreover, the consumption of meat is commonly considered a sin by Hindus, and pork is also banned in Muslim's diet. Hence, the economic activity of this family is highly controversial because it is associated with "taboo" consumption behaviours followed by some inhabitants. We interviewed this family, and they confessed to selling pork to Hindus males from different *jati*, mostly Thakurs, and sometimes they are asked to cook pork for them and serve it directly in their house, in order to consume it out of sight. This anecdote highlights the complex nature of the relations between different castes in Palanpur.

There is a general anti-caste discourse taking place in the village, but it results to be very contradictory with the way people from higher *jati* behave to distinguish themselves from the others. Contrary to what Lanjouw and Stern observed as a change in caste relations (1988: 212), the socio-economic improvement of lower castes is not welcomed from members of higher castes. At the opposite, it exacerbates the rivalry between different *jati*. In particular, Thakur, who have experienced a downgrade of their ritual status in recent decades, complain about Jatavs economic mobility and consider it as a threat for their symbolic superiority.

Several Thakurs witnessed, in the interviews, a feeling of fear for the future of their community with the Jatav's ascension: "The Jatav work hard in brick-kilns and earn money, they build houses and go to the cities to work. They are getting richer and we are getting poor, we lose our land and now we have nothing. Agriculture is not enough but we cannot work in physical

jobs because of ijjat (honour), but it is not easy for me to find a dimak ka kam (brainy job) because I am not educated so there is no opportunity for me and I have to stay here looking after the field but not earning any money for my child".

2.6 Land and households in Palanpur

Together with caste, the joint household model constitutes an essential component of the agrarian society in India. Most of the studies on rural societies in developing countries, rely on the household as unit of analysis to study the relations of production, the social status and the economic assets. Indeed, in the rural societies primarily based on subsistence farming, the household is the main unit of production. However, with the economic transition, the diversification of the economy and the expansion of non-farm employment one would expect the centrality of the joint household in the social structure of the rural societies to be undermined.

2.6.1 The household model

The notion of household is not easy to define in the context of rural India: Kolenda (1968) made a comparison of 26 studies of Indian household types and noted that any of them applied the same definitions. As per the Census of India, a household is a group of persons who live together and take their meals from a common kitchen unless the exigencies of work prevent any of them from doing so. The joint household is the predominant model of family structure in rural India. This model is commonly extended to three generations of males lineally descendent from a common ancestor and includes their nuclear families, wives and children. Daughters leave their original household after marriage and go to reside with their family-in-law. The joint family may also extend to other members, like the head's widowed mother, if alive, the head's brothers and sisters or some relatives of his wife in extraordinary circumstances.

For the sake of clarity, we distinguish in our analysis only two typologies of household structure: joint and nuclear. The joint household includes the patrilineal joint family, where the patriarch is the head and the patri-fraternal joint family, consisting of several married brothers and their nuclear families where the eldest son normally becomes the household head after the death of his father. Nuclear household generally corresponds with an episode of partition. In the joint typology, the headship is transmitted through the process of inheritance to the eldest son who continues to share with his

brothers the land ownership and other indivisible productive assets, while in the second case the common ownership gets divided in rights and use. In both cases, the previous head can be died, migrated or still alive.

The persistence of extended joint household in rural India and other parts of South Asia has been extensively debated in the 1990s with the emergent tendency of household partition (Foster 1993, Ram and Wong 1994, Kolenda 1987, Freed and Freed 1982) but different case studies lead to incongruent conclusions concerning the determinants of the household structure. Indeed, the joint family controversy was challenged by problems of definition and a scarcity of data that involved a significant time dimension (Freed and Freed 1982, Doveri 2000).

We found that episodes of household partition have become more frequent over time, and we attempt to identify a set of determinants at the individual and household level (see section A.4 in the Appendix). Lanjouw and Stern (1998) found a positive correlation between landowning and fertility in Palanpur, consistent with other studies at an early stage of the demographic transition (Nagarajan and Krishnamoorty 1992, Saavala 1996). They suggest that the reason for the positive link might be that landed households tend to live in extended joint households where the consumption function of an additional child weights less compared to nuclear households because the cost of child-bearing is shared among all the adult members. But, according to Das Gupta's (1984) hypothesis, this relationship may disappear at later stages of the demographic transition reflecting that wealthy households are more inclined to control fertility because of higher income and higher educational achievement.

Our results show that there is a negative association between landowning and partitioning, especially for large landowners. This point confirms the argument of Lanjouw and Stern of households living jointly and suggests that economies of scale and maintenance of a joint structure, where resources and expenditures are pooled together, are preferred by landed household who would meet significant losses by fragmenting their estate through partitioning. Moreover, we found a higher rate of fertility associated with partitioning, suggesting that fertility control is higher for couples living in a joint household. These associations explain in large part the propensity to partition for most of the population in Palanpur and irrespective of the caste affiliation except for the Jatav, a sub-caste from the bottom of the caste hierarchy, who appear to have a specific preference for partition.

A further argument consists of the aversion for land fragmentation among households with large landholding. Landless have nothing to lose by having many children while farmers who own land have much to lose from subdividing the land for their children and so they tend to have lower fertility (Vlasoff and Vlasoff 1980, Schutjer et al. 1983). This hypothesis is persistent with the studies indicating a strong association between joint-family living and land ownership in rural India (Mandlebaum 1970, Swartzberg 1979, Caldwell et al. 1984, Ram and Wong 1984, Krishnaji 1984, Nagarajan and Krishnamoorthy 1992). Economies of scale in agricultural production offer a plausible explanation for this association: living in a joint-family may be particularly advantageous for landed families. Some of the advantages include mutual insurance, the transmission of knowledge across generations, physical strength and protection against theft, the achievement of power and prestige in the village society (Mandelbaum 1970, Swartzberg 1979, Srinivas 1982, Oldenburg 1992, Lanjouw and Stern 1998).

However, Wall's studies of four English communities in pre-industrial time raised contradictory conclusions concerning the availability of land and household composition. His results showed that landless households and small landholders were living in extended families as much as large landowners, while artisans and merchants were even more extended, which means that the latter had a stronger preference for extended joint household than landed households and cultivators. Wall's study challenges the theoretical assumption that in preindustrial societies the availability of land has a direct effect on the household structure and the demographic trends. Instead, Wall suggests that land cannot be taken for granted as the most critical factor in determining the household structure and the demographic behaviours should be examined by taking socio-economic and cultural factors in consideration (Quinlan, Shackleford, 1994).

However, by looking at state of the art, it seems that investigations on the presence and the role of different family ethics according to different social groups behind the link between land and family structure are very limited. Caldwell, Reddy and Caldwell (1984) applied a quasi-anthropological approach to the study of the determinants of family structure in 9 villages from South India and stated that caste and socioeconomic characteristics did not affect the family patterns. Because of substantial similarity in behaviour between different caste, they did not distinguish caste groups in their analysis and concluded that the society was remarkably homogeneous. They also argued that there was little evidence of transition in family structure since there were no systematic aspects in timing or nature of household partition and they claimed that families are more likely to change in terms of internal relations and in the likelihood of wealth flow reversing (Caldwell, 1982) than they are in external structure.

2.6.2 The land succession rights

Inheritance and partition follow specific rules of land succession. According to the Hindu Succession Act of 1956 in the absence of a will, all the direct heirs of the head have the right to an equal share of his property. Heirs consist of his wife and children, sons and daughters, and his widowed mother, 10 but in practice, patrilineal inheritance is the common rule followed in rural areas, which implies a partible inheritance to sons. According to the Hindu law the ancestral property, defined as an undivided property of the household which has been inherited through at least four generations of male lineage, differs from self-acquired land in rights. In the case of ancestral property, the rights accrue by birth only, contrary to inheritance rights that open on the death of the head, and they are determined per stirpes and not per capita. Once an ancestral property is partitioned between the members of the household, it ceases to be ancestral property and the share of each coparcener becomes their self-acquired property. In case of partition before the death of the patriarch, it seems to be no agreed norms about the succession of land. Lanjouw and Stern (1998) say that in such situation a form of pre-mortem inheritance takes place: formal ownership rights remain vested in the head, but the use of the share of land destined to his son's inheritance is conceded on a long-term basis.

2.7 Land and jati

With the population pressure and the fragmentation of the land property from generation to generation, all the *jati* have experienced a dramatic decrease in the landowning size per household over time, but not at the same pace (Figure 2.4).

Thakur, who accounted for the largest landowners until 1975, are those who lost the most significant amount of land in both absolute and proportional terms; Moria acquired some of the lands sold out by Thakur and became after 1975 the most prosperous landowners in Palanpur. Jatav have lost less land in absolute term, relatively to Thakur and Moria, but they have always held smaller parcels of land per household. Interestingly, after 1984 there is a converging and decreasing trend for all the *jati* while before 1984 different trends were swinging from a survey year to the other, meaning that in recent decades the whole population is under threat of land shortage

¹⁰Only male members were coparceners prior to the Amendment Act stipulated in 2005 which confers equal rights of coparcener to daughters but it is very rarely respected in practice.

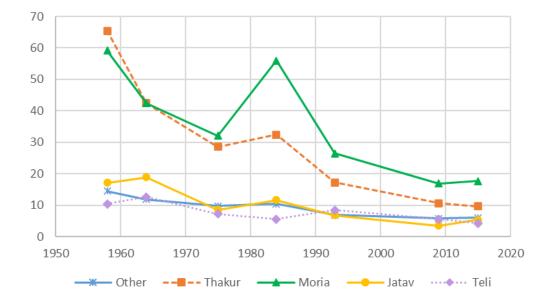


Figure 2.4: Average owned land per household by jati

with the increasing demographic pressure. Change in land ownership at the household level is the result of two distinct types of transfers: land market transactions and the process of land fragmentation through land succession. The land market is not very active in Palanpur, and previous studies have shown that the changes in land distribution are really driven by the second type of transfer (Lanjouw and Stern 1998). In other words, the land endowment of a household depends far more on the capacity of the household to keep the ancestral property undivided after the death of the head.

However, we observe in Palanpur an overall increase of partitioning from almost zero cases in 1963 to a quarter of the households in 2009. Partition rose significantly after 1984, but when we look at the partition rate by *jati*, we notice that there is not a linear pattern for the whole population. Jatav partition more and their pattern diverges from the ones of Thakur and Moria which are similar.

This divergence could be related to the fact that they have smaller landowning, but it is also possible that they follow a different family ethic and they are less attached to the model of joint household. Having never had large landholding, they might value less the land for its function of social marker; instead, they seek for outside non-farm jobs and they are more emancipate from the agrarian social structures. Jatav tend to have smaller households than Thakur and Moria and to partition more than Moria and Thakur. Overall, Thakur is the group who has experienced the most significant change:

from large households to the smallest average size of household.

Since one of the major differences between the *jati* in the trends observed is landowning, we can speculate that the household structure in Palanpur is determined by the size of land ownership and the demographic pressure internal to the household. We speculate that landed households would partition less to preserve the ancestral estate and avoid losses in land fragmentation. Concerning landless households, they are expected to partition more because they are under-exposed to the risk of losses with the land inheritance.

2.8 Conclusion

In this chapter, we presented the case study, the context and the motivations for choosing Palanpur as a case study, namely the availability of unique longitudinal data at the individual and household level, the possibility to disaggregate the caste information at the *jati* level and the need to develop a more comprehensive analysis of the integration of the village economy with outside labour markets.

We presented the methodology which combines statistical and econometric standard methods of social mobility studies with in-depth fieldwork in a triangulation design aimed at mixing both qualitative and quantitative data at different stages of the research. We gave a detailed account of the fieldwork methodology, the interviews carried out in Palanpur and among migrants in Punjab, Haryana and Himachal Pradesh and a summary of the profiles of the respondents. We described the survey data and the population observed. We described the caste hierarchy in Palanpur, at the *jati* level.

We analysed the residential morphology of Palanpur, illustrated by a map, and we gave an overview of the caste relations using parts of the semi-structured interviews we carried during the fieldwork. The clustering of all the Jatav households at the outskirt of the village, near the pond, suggest that residual forms of social exclusion and discrimination based on caste are still active in the village. We also discuss the household model in rural India and the determinants of household partition in Palanpur related to the population expansion, the decreasing available land per household and the social norms.

Chapter 3

Occupational transition and spatial mobility

3.1 Introduction¹

Spatial mobility and occupational transition from farm to non-farm occupations have become the hallmark of the economic transformations in rural India over the last three decades, with a remarkable increase of rural-to-urban streams of labourers (Denis and Zérah, 2014, Chandrasekhar and Sharma 2015) and a significant shift of the rural workforce from agriculture to the secondary and the tertiary sectors of the economy (Bhattacharya and Srivastava 2002; Lerche, Guérin and Srivastava 2012). However, contrary to the modernization of the economy in Western countries, the structural transformation of the economy in India has peculiar traits with specific implications for the occupational conversion of the rural labour force and the patterns of labour mobility.

The working population in rural areas, mainly composed by small and marginal farmers,² rely on urban non-farm markets as a strategy of substitution or diversification of occupations to ensure the subsistence and to compensate with the periods of farming inactivity and the decrease of the land availability per active worker in agriculture (Himanshu et al., 2011, Dorin, 2017). Construction and services, the leading sectors of the Indian economy in recent decades, are mostly concentrated in urban and peri-urban areas. Thus it implicates for the rural population to leave the village for

¹This chapter is partly based on the paper "Labour casualization and spatial mobility" published in Handbook Of Internal Migration (Ed. Irudaya Rajan, SAGE edition, 2020) and partly on a working paper co-authored with Himanshu (in progress).

²According to the Report of the Working Group on Employment, Planning and Policy for the 12th Five Year Plan, 84% of India's farmers till only less than 2.5 acres of land.

working outside. However, the attractiveness of non-farm unskilled jobs in those sectors is generally not strong enough, in terms of protection, regularity and returns, to induce irreversible movements of the rural population (Breman 1996, 2013, Mohanan, 2008). Moreover, the conditions of life endured by uprooted workers make the household migration barely feasible and rarely desirable (Landy and Racine, 1997): higher costs of living, crowded and insalubrious settlements, difficult access to schools for children, discrimination, lack of social protection and issues of security and reputation for women migrants.

As Kundu (2007) shows, the contribution of net rural-to-urban migration to the urban growth has not increased significantly in time (in 1991-2001 it accounted for 21%); Pradhan (2013) estimates that 22,2% of urban population growth in the period 2001-2011 can be attributed to migration. Work migration to urban areas has remained low despite the restructuring of the Indian economy comparatively with other developing countries. According to the Census of 2011, 3.5 million migrants who moved within the year previous the census stated economic reasons for migration. The National Sample Survey in 2007-08 reveals that the proportion of migrants moving for employment reason was as high as 32%. New estimates based on the India Human Development Survey, shows that the stock of labour migrants increased from 16 million in 2004-05 to 60 million in 2011-12. In contrast, it is estimated that China has over 150 million official internal migrants (FAO, 2012).

However, the official statistics in India are thought to depict a figure which stands very far from reality. The Census of India defines a migrant as "an individual who moves from a village, or town, to another village or town provided his/her movement is not purely temporary, casual leave, visit, tours, etc. When a person is enumerated in census at a different place than his/her place of birth or of last residence is considered a migrant". The NSSO (National Sample Survey Office) would consider someone as migrant "if he/she had stayed continuously for at least six months or more in a place other than the village/town where he/she was enumerated". These definitions are problematics because they do not capture shorter movements which not imply any change of residence.

In India we don't observe a proper rural exodus (Banerjee 1984; Landy and Racine 1997; Munshi and Rosenzweig 2009); the emerging predominant component of the human flows connecting villages and towns in the labour market is not residential migration (implying a change of residence) but temporary, seasonal or circular mobility, including "short-term" migrants and commuters (Chandrasekhar and Sharma, 2015). These kinds of migrants have been defined by some as "les mobiles du travail" (Dupont, 1991), "the footloose labourers" (Breman 1996), "the floating population" (Mohanan,

2008). However, due to a lack of exhaustive surveys of these short-term, seasonal and cyclical migrants, there is little available in the literature on the size and the trends of temporary migration for work in India. The NSSO has introduced for the first time the typology of short-term migration in the 64th survey round in 2007-2008. This category includes temporary changes of place of residence of 30 days or more, but not more than six months in the preceding 365 days and for reasons related to work. According to this definition, the NSSO estimate at roughly 15 million the short-term migrants in 2007-08. Of these, 85 % were males, and 77 % were officially residents in rural areas. More than two-thirds of them migrated to urban areas. Despite the improvement of the NSSO in coverage of circular or short-term migration, the official estimates still appear as inadequate comparing to micro-studies suggesting that the total cyclical migrants in India could be nearly 100 million (Deshingkar and Akter, 2009)

This chapter brings evidence of the evolution of spatial mobility as a response to the structural transformations happening in Palanpur over the last decades. Indeed, a crucial feature of transformation in Palanpur has been the increasing integration of the village population with the "outside world". The interlinkages of Palanpur with surrounding areas are not just limited to movement of labour to access outside jobs, one of the drivers of change in the village by Lanjouw and Stern (1998), but also in terms markets for credit, agriculture and services. The interlinkage with the outside has resulted in changing markets and institutions in the village. While there was always some interaction with the outside world as far as employment choices and migration of households is concerned, recent decades suggest a change in the way Palanpur residents have interacted with the outside world. Commuting to small and medium towns for working in unskilled and irregular jobs has become the predominant pattern of labour mobility, rather than migrating for regular employment as it has been observed earlier by Lanjouw and Stern (1998).

The acceleration in the trend towards outside jobs in Palanpur has followed the trend of non-farm diversification in India since the 1970s. However, a distinguishing feature of the nature of non-farm diversification in the last two decades has been the nature of employment that is created in the non-farm sector. There is evidence based on the NSSO (National Sample Survey Office) Employment-Unemployment Surveys that the majority of new jobs created in the last decade was informal and largely casual in nature. Casual labour is defined as a daily wage job, unskilled and generally informal. The trends observed in Palanpur show a dramatic conversion of small and marginal peasants into non-farm casual occupations in the construction sector and allied activities. Although the wages are marginally higher than the

salaries in agriculture (Himanshu and Lanjouw, 2013), these jobs are very precarious. In contrast, the first phase of non-farm diversification in the late 1980s, described by Lanjouw and Stern (1998), was characterised by increasing migration for regular forms of employment.

In this chapter, we look at the whole spectrum of labour flows connecting the working population from Palanpur with outside labour markets and explore the trends and patterns of the emerging patterns mode spatial mobility related to the changes in the structure of opportunity. In the first part of the chapter, we contextualize the phenomena of labour mobility in the larger picture of the structural transformation of the rural economy, and we describe the spread of casual non-farm jobs in Palanpur over the last decades, in size and nature. In the second part, combining qualitative information from the interviews with data on migration, we analyse the emergence of commuting as the main pattern of spatial mobility and we the changing geographic economy of Palanpur, comparing the work localities of migrants and commuters.

3.2 Structural transformations and non-farm occupations

The structural transformations of the last half-century Indian economy,³ characterised by a steady, significant increase of services followed by construction, a slow but progressive rise of manufacturing and inversely a sharp decline of agriculture in terms of GDP growth rate (Figure 3.1), have been accompanied by the adoption of neoliberal reforms in 1991. These changes, coupled with the increasing urbanization, had far-reaching impacts on all the aspects of the economy and the society of the rural areas.

Kishan, an inhabitant of Palanpur, actually working as a regular employee for an electricity company based in Moradabad, and previously teaching in a private school in a close village, complains about the distress of cultivation in the village and the fall of the cultivable land available per capita: "it has been dividing, it has been cutting, it has been reducing". In Palanpur, the share of agriculture as a primary occupation⁴ has been gradually declining with only 35% of the total adult male working population having their primary

³We define structural transformation the reallocation of the economy across three broad sectors: agriculture, industry and services (Johnston and Mellor 1961, Chenery and Srinivasan 1998, Herrendorf et al 2014, Dorin 2017).

⁴Primary on the basis of major labour-days spent in that occupation during the reference period of 365 days preceding the date of the survey.

60 Services 50 40 Industry 30 27 20 Agriculture 10 1950 1960 1970 1980 1990 2000 2010

Figure 3.1: Sectoral contribution to the national GDP growth from 1950 to 2015

Notes. Source: World Bank, 2015

occupation in the farm sector in 2015, while 90% were involved in agriculture in 1958 (Figure 3.2).

This evolution is not specific to Palanpur: according to the Census of India, farming was the main occupation for 110 million cultivators in 1991, 103 in 2001 and 96 in 2011; the National Sample Survey Office indicates that 23 million agricultural full-time jobs have been lost between 2005 and 2010. Nevertheless, the net total workforce expanded of about 79 million since 2001 and reached in 2011 almost 482 million: the shift is toward non-farm jobs (Denis and Zérah, 2014).

However, the structural transformations in India are accompanied by a paradoxical situation of "jobless growth" (Dorin and Aubron 2016, Raveendran and Kannan 2009; Zerah and Denis 2014) that tends to affect more deeply the rural labour force. Indeed, extreme poverty is actually reducing overall India, but it is unequally distributed: 80% was concentrated in rural areas in 2012, according to the Indian Reserve Bank. The mismatch between the demand for high skilled workers in the modern sectors of services and the growing offer of the unqualified working population from rural areas generates a disequilibrium in the labour market. In this context, the rural labour supply is undervalued and easily interchangeable in urban and peri-urban markets.

⁵Zerah and Denis (2014) show that India needs actually at least 11 million of additional jobs per year – twice the job addition between 2005 and 2010 – only to maintain the current ratio of employed people to total population of 39%.

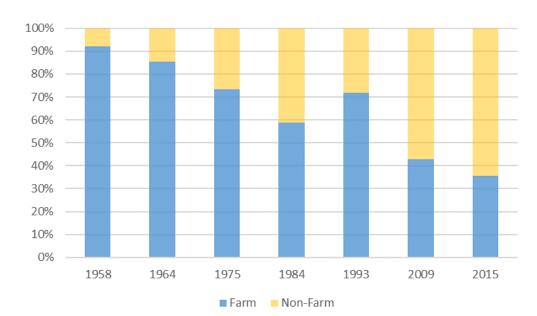


Figure 3.2: Share of working adult males in Palanpur with primary occupation in farm and non-farm sectors

According to the modernization theories and the standard development economy, the structural transformation is characterized by a fall of the share of agriculture in the GDP and in the employment structure with convergence in the long run of the productivity level of agriculture with the other sectors, but Dorin (2017) disputes the unicity of this path. He shows that in India, the share of the active population in agriculture declines proportionally to the other sectors but continues to grow in absolute terms. According to the last Census (2011), 55% of the working population is still active for more than six months per year in agriculture (263 million individuals). Dorin argues that the "Lewis Path" assumes in India the form of a trap characterized by a dramatic pressure on the cultivable land and an increasing gap of farm productivity and income compared to other sectors.

The diversification of livelihoods is a commonly applied strategy for coping with the distress of agriculture and the scarcity of regular sources of income among rural households (Ellis 1998, Lanjouw and Lanjouw 2001). In Palanpur two-third of the households have in average three different occupations, and some of them hold up to as many as seven different occupations (according to our estimates in 2009). In the context of pluri-activities, agriculture tends to become a subsidiary source of income. Diversification is also a response to the economic uncertainty and the fluctuations in the labour

demand aggravated by the flexibility of the labour market and the informal framework in which the non-farm activities take place. The spread of non-farm jobs in villages has to be considered together with the strong precariousness characterising them (Himanshu, 2010, Himanshu et al., 2013), especially when it comes to unskilled or semiskilled jobs.

With the new policy reforms of the early 1990s and the development of an externally liberalized political economy, a state of increased flexibilization of the labour market has been acknowledged in the Indian labour market (Srivastava 2015). If the dogma of the flexibility has been claimed positively by many policymakers for the last four decades, encouraging greater competitiveness both at the firm and the country level, the economic growth seems not to be translating into better economic opportunities for all the sections of the population. Besides the loosening of the regulation, the modernisation of the economy and the steady growth of the GDP, India is still a vast informal economy (Chandrasekhar and Ghosh 2013).

According to ILO's estimations, the overall proportion of informal workers in total employment has remained relatively stable in time at around 92% (ILO, 2016), NSSO's survey reports that more than 90% of the employment in the agricultural sector and close to 70% in the non-agricultural sector falls under the informal category in 2011-2012. More interestingly, ILO underlies two diverging trends: the share of workers in the unorganized sector fell gradually in recent times, while the share of informal workers in the organized (i.e. workers without access to social security and employment benefits) increased significantly because of greater use of short-term contracts and other forms of casual labour. Casual labour is generally defined as irregular employment, usually on the hourly or daily basis. Casual labourers engaged in farm or non-farm enterprises such as construction, community services, and agriculture, tend to earn only through daily wages and thrive in the informal sector. According to the Fifth Annual Employment and Unemployment Report (2015-16), casual labourers represent 33% of the employment in India. Indeed, it has become the most prevalent form of employment, second only to self-employment.

⁶According to Eyck (2003) flexibilization implies the rise of "labour force flexibility" (sector and time) and "locational flexibility" (relocation of production centres).

⁷The National Commission for Enterprises in Unorganized Sector (NCEUS) defines unorganized/informal sector as "all unincorporated private enterprises owned by individuals or households engaged in the sale and production of goods and services operated on a proprietary or partnership basis with less than ten workers" whereas informal workers are defined as "those working in the unorganized sector or households, excluding regular workers with social security benefit provided by the employers, and the workers in the formal sector without any employment and social security benefits provided by the employers".

3.2.1 Casual labour: incidence and features

Himanshu et al. (2013) have shown that two-thirds of the rural non-farm workers in India are absorbed in the construction sector and the remaining in services and manufacturing. The construction industry is mostly a source of casual manual labour, the services are provided by skilled self-employed and unskilled casual labourers, and finally, manufacturing is the only sector where regular forms of employment are accessible. In Palanpur, the rise of casual labour is particularly significant, with an increase of 20 points in the proportion of casual labour among adult males between 1993 and 2015. Table 3.1 shows the distribution of the adult male working population by broad categories of occupation across the survey years.

Table 3.1: Primary occupation of adult males by years (% by year)

Primary occupation		1958	1963	1975	1984	1993	2009	2015
Cultivation and livestock	freq	133	125	124	139	178	131	120
	%	77.8	67.6	56.4	48.1	51.1	33.2	27.9
Regular employment	freq	6	14	42	65	40	50	47
	%	3.5	7.6	19.1	22.5	11.5	12.7	10.9
Self-employment	freq	7	7	10	22	19	61	65
	%	4.1	3.8	4.5	7.6	5.5	15.4	15.1
Agricultural labour	freq	20	11	18	14	30	12	6
-	%	11.7	5.9	8.2	4.8	8.6	3.0	1.4
Casual manual work	freq	0	2	0	20	23	79	115
	%	0.0	1.1	0.0	6.9	6.6	20.0	26.7
Missing	freq	5	26	26	29	58	62	77
	%	2.9	14.1	11.8	10.0	16.7	15.7	17.9
Total	freq	171	185	220	289	348	395	430
	%	100	100	100	100	100	100	100

Agricultural labour is also of a casual kind: the payment is daily based, or piece-rate based, and the contract is informal. However, we distinguish agricultural labour from casual manual work to highlight the transition out of farm activities. Indeed, agricultural labour only concerned 1.4% of the working population in 2015, while casual manual work became the predominant employment status in the village (26.7% in 2015).

Casual contracts are generally granted directly via personal contacts or at the mazdoor mandi (labour market) in the nearest cities where workers from all over the district come to seek for a job in construction sites and manufacturing units, via contractors (intermediates or middlemen) who also attend the mandi. The wage rates for daily workers generally vary between 200 Rs to 400 Rs depending upon the type of work, the level of qualification and the locality.

Non-farm self-employment is second among the primary occupations that have shown a strong rise between 1993 and 2008 in Palanpur, partly in response to the distress in the farm sector (Himanshu, 2011). In India, self-employment is the largest groups overall the informal workers (32,2% in 2016 according to ILO). Most of the self-employed fall in the informal sector, they are unincorporated enterprises, they don't declare paid domestic work, they don't register their employees and in general their collection or data are not regulated under any legal provision or do not maintain any regular accounts.

In 2015, 15% of the working population in Palanpur was involved in selfemployment. The number of shops in Palanpur has increased from 2 in 1958 to over 15 in 2015; however, the spread of self-employment coincides principally with the expansion of marble polishing activities, the opening of motorbike repairing shops in nearby towns and with some rickshaw' drivers in Delhi. Some of the narratives we collected among self-employers highlight the process of skills and capital accumulation that have led a few of them to develop their own business and consequently to train and recruit additional workers from their networks. Simultaneously with the spread of casual manual work and self-employment as primary occupations, we observe a dramatic increase of cultivation and livestock as a secondary occupation (Table 3.2). Before 2009, cultivation and livestock was the principal primary occupation, but later one there has been a substitution of agriculture from the primary source of livelihood to the secondary source. This substitution has coincided with a general rise of the individual pluri-activity: in 1993 68.1% of the working population had only a primary occupation, while in 2015 two-thirds of the working population also had a secondary occupation.

The combination of non-farm primary occupations, mostly located outside Palanpur, and cultivation or livestock as secondary occupation require the individuals to adopt some strategies of spatial mobility which allow them to balance their working time in both the activities. Since the landholding per capita has reduced considerably in the last decades, the option of

⁸Unincorporated enterprise means that it is not constitutes as a legal entity separate from its owners and it is owned and controlled by one or more members of one or more households and it is does not have a complete set of accounts including balance sheets.

hiring labourers for regular farming is an option that not many could afford anymore. The greater farm mechanization since the green revolution in the 1970s has reduced the need for the extra labour force; however, some activities, such as harvesting, continue to require huge manual operations. Except for harvesting, self-cultivation is the option preferred by the majority of farmers in order to reduce the cost of production. The participation in cultivation is highly seasonal, and thus it allows to some extent to combine non-farm work with care for the fields. However, commuting to nearby towns seems to be more viable than migrating for a longer period to combine both. In case of only one member of the household migrates, the others can take care of the fields. This strategy is commonly applied by joint-households. If the whole household migrate, the land needs to be leased out of sold out.

Table 3.2: Secondary occupations of adult males by year (% by year)

Secondary occupation		1958	1963	1975	1984	1993	2009	2015
Cultivation and livestock	freq	12	6	1	31	7	165	172
	%	7	3.2	0.5	10.7	2	41.8	40
Agricultural labour	freq	18	15	21	21	18	16	7
	%	10.5	8.1	9.6	7.3	5.2	4.1	1.6
Casual manual work	freq	7	1	4	17	26	21	30
	%	4.1	0.5	1.8	5.9	7.5	5.3	7
Regular employment	freq	7	11	4	3	2	2	2
	%	4.1	6	1.8	1	0.6	0.5	0.5
Self-employment	freq	1	6	3	9	6	14	11
	%	0.6	3.2	1.4	3.1	1.7	3.5	2.6
Non sec occ	freq	121	120	161	185	237	152	149
	%	70.8	64.9	73.2	64	68.1	38.5	34.7
Missing	freq	5	26	26	23	52	25	59
	%	2.9	14.1	11.8	8	14.9	6.3	13.6
Total	freq	171	185	220	289	348	395	430
	%	100	100	100.1	100	100	100	100

3.3 Patterns of spatial mobility for work

The analysis of the labour mobility in Palanpur confirms the national trend of a relatively low level of migration, with only 17% of migrants among the active male population in the period 2009-2015. Notwithstanding, nonfarm jobs account in Palanpur for the main source of occupation in the same period. These jobs are largely located outside the village (Mukhopadhay 2011): two-third of the households had in 2009 two or more different type of occupations (Himanshu et al. 2016) that require to "step out" of the village. Recent decades have seen increase in commuting to nearby areas for employment. While migration and commuting are partly a response to changes in the labour market and pressure on land in the village, it is difficult to separate the changing pattern of engagement with the outside world from the changes exogenous to the village. The urban areas around the village are not static and they have also changed in the last two decades becoming more dependent on the rural areas for labour as well as markets. The emergence of small and medium towns around Palanpur is also linked to the emergence of new patterns of spatial mobility. The small and medium towns are not just new centres of urban growth but have also emerged as new drivers of employment creation for the rural economy.

While both commuting and migration were seen as important feature of Palanpur economy, the period after 1993 has seen an intensification of the spatial mobility. Improvements in transportation and communication infrastructure has allowed the increasing pool of labourers to access the outside labour market without physically moving out of the village. Unlike the past where the cost of migration and the unfamiliarity of the urban milieu was a deterrent for the poorer households without the social capital to access the urban labour market, the emergence of commuting has allowed even the poorer households, notably from the lowest caste groups, to access these markets which were hitherto inaccessible to them. Table 3.3 gives the count of households who migrated during the survey period. The information is provided by jati of migrating households. The last row gives the total number of households in the base year. The information provided in this table has been calculated matching the presence of the household in the subsequent survey year. Information for the first four columns is based on the data collected previously and is almost similar to the information provided in Lanjouw and Stern (1998). Only for the last two survey years, we have excluded the households which are not available in subsequent survey year

⁹We define a migrant a person who resides outside Palanpur for a minimal period of 6 consecutive months.

due to attrition. The information presented here does not include nuclear households who have migrated out, but their previous joint family is still in the village. It also excludes households which have migrated but returned back before the subsequent survey.

Whole house migration in Palanpur has been observed since the first survey period of 1958-64 when nine households migrated after 1958 survey. Overall, there is a decline in migration rate in the village since the first two decades. It is less than 1% for the last two survey rounds. Over the entire duration 85 households have moved out of the village during various periods. The largest percentage of household migration, proportionally of base households, took place between 1964 and 1975. The Green Revolution was at its peak during that period and it is surprising that a large number of households migrated out from the village in the meanwhile. The majority of the households who migrated at that period are from castes historically characterised for being landless.

	1958-63	1963-75	1975-84	1984-93	1993-09	2009-15
Thakur	0	1	2	4	6	0
Moria	0	3	2	0	6	0
Jatav	3	0	0	0	4	5
Teli	0	0	0	1	1	3
Other	6	11	3	7	10	7
Total	9	15	7	12	27	15
Migration Rate	1.50	1.29	0.66	0.84	0.93	0.93

Table 3.3: Number of migrated households by jati

Among the caste groups who migrated the most, Passis account for two-fifth of all migrating households (Passi is a residual caste included in the group "other"). Lanjouw and Stern (1998) mention the nomadic nature of Passis. They were in-migrants before the first survey from eastern Uttar Pradesh. Majority of them were engaged as workers in the railways but also in other non-farm occupations. These households have seen an exodus from the village with the population share of Passis declining from more than 10% in 1950s and 1960s to only 2% in the last survey decade. On the other hand, the numerically dominant castes of Thakur, Moria and Jatav have seen

 $^{^{10}{\}rm Ansari~Report}$ (1964) mentions 4 households were staying out of village in 1958 which is the first survey year.

comparatively lesser migration. The Morias in fact are the caste group which has been the least mobile. Their affinity to cultivation and land along with reluctance to engage in non-farm has meant that their survival strategy has been dependent on the village rather than exploring outside opportunities.

Migration of whole households have had significant consequences for the demographic composition of the village. Migration of smaller caste groups from the village has resulted in increasing concentration of the three dominant groups of Thakur, Moria and Jatav households. These three caste groups accounted for 55% of village population in 1958. The share of these households in 2015 was 66% of the village population. The largest decline are Passis who were the fourth largest caste group accounting for 12% of the population in 1958 and only 2% in 2015.

Analysis of individual migrants also suggests that the caste pattern of migrants is similar to whole house migrants with Passi, and other smaller castes dominating larger caste groups such as Thakur, Moria and Jatav. However, the last two decades have seen Jatav jati members also migrating along with Telis. These two jati have been historically landless and thus they do not have to lease out or sell their land to migrate out. On the other hand, thei need of regular sources of income is a crucial push factor for them to migrate more than others. Household migration often involves requirement of substantial amount of money to set-up household in urban areas. It also requires some idea of the functioning of the urban labour market.

The process of migrating is not sudden and often involves a member of the household first moving out and then once the person is settled there, the family moves out. While whole household migration has been low in the village and does not show any increase in the trend towards migration, individual migration has slightly increased over the years. But overall, the predominant pattern of spatial mobility of individuals has become commuting. We define commuters not only those who commute daily but also those who migrate up to three consecutive months outside Palanpur.

3.3.1 Working outside Palanpur

Growing population, declining per capita land ownership and lack of demand for labour due to the advent of farm mechanisation has led to continuous attempts by residents of Palanpur to search for job opportunities outside agriculture. These include employment outside agriculture not only in Palanpur but also outside the village, outside the district an in places from other regions as far as Delhi and Ambala. A few example of people who have moved out of Palanpur for employment include a Dhimar Siyaram who works in a sugar factory in Jalandhar, Mustaq who first learnt the work of carpentry in

Delhi and the imparted these skills to his sons who also now work as carpenters in New Delhi. The brother of Mustaq, Istaq had moved to Saudi Arabia for the same work, and would often visit the village. A common perception amongst the villagers was that employment outside of Palanpur was definitely more remunerative than in Palanpur as living standards of the family had improved. This also served as a source of inspiration for many others who wanted to go out of the village in search of employment. Residents in Palanpur have made continuous efforts to innovate not only in terms of their agricultural practices and technology but also in terms of the occupation. Many villagers have tried new forms of business and occupations some of which have been successful and led to employment generation for others within the village.

The growth of non-farm employment has benefited from easier connectivity to nearby towns and cities. Palanpur is fairly well connected to the nearby towns of Moradabad and Chandausi by rail and road. Moradabad is a bigger city close to Delhi and is known for its brass industry and brass handicrafts being one of the major exporters of brass as well. The residents of Palanpur have been exposed to these cities via various interactions which include sale of agricultural produce, purchase of inputs or through members or relatives who reside in these cities.

Growth of linkages between the village and the nearby towns has led to a major exposure to occupation opportunities outside the village. The economic dynamism of the small and medium towns in the vicinity (Chandausi and Moradabad) in the last decades has resulted in an expansion of a range of manufacturing and service-related jobs in these areas. The ease of access to these urban centres has attracted many villagers to commute for work. Lanjouw and Stern (1998) claim that in the period up to 1993, the expansion of non-farm activities mostly took the form of regular employment outside the village. Between 1958 and 1993 the number of these jobs grew from 11 to 49. However, the opportunities of regular employment decreased in the subsequent years and manual work and self-employment have become the main occupations performed by commuters outside Palanpur. Figure 3.3 highlights the share of outside occupations, cumulative of migrants and commuters, on the total non-farm economy, by available year.¹¹

While, in the 1970s and the 1980s the non-farm occupations were almost exclusively located outside Palanpur and mostly arose in nearby villages or Chandausi, from the 1980s the network of outside jobs has increased significantly in other cities too. In 2009 and 2015, the share of outside non-farm work has decreased to around 60%, compared to 1984, because of the devel-

¹¹The information concerning the workplace is not available for 1993.

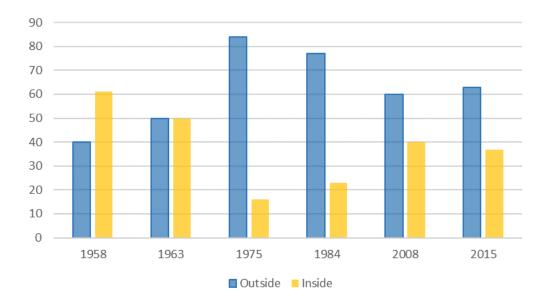


Figure 3.3: Location of non-farm occupations by year

opment of non-farm occupations inside the village like shops and services. Indeed, while commuting and migration has helped Palanpur residents to find employment outside, it has also helped them acquire information and know-how which has been used to set up non-farm enterprises in the village The main patterns of outside labour are seasonal employment in brick kilns and factories and seasonal agricultural labour. In some cases, work as farm labourers outside the village in Punjab where cultivation is profitable is also seen as an attractive opportunity. Wages are generally higher than in Palanpur, people from the higher caste can also avoid the dishonour of working as agricultural labourers in the village. A Thakur household headed by Chandrapal Thakur who moved out with his wife Munnu Devi to Punjab where they found employment as regular agricultural labourers. They moved out because of higher income as well as to avoid the shame of working as casual labourers within the village.

3.3.2 The changing economic geography of Palanpur

The economic development of the towns in the vicinity has also contributed to the emergence of new patterns of labour mobility. Census towns are administrative units categorised as villages and categorized as towns by the Registrar General of India (RGI) for classification in the census. One of the primary reasons these villages are classified as census towns is the increase

in employment structure. The census defines an urban area as a habitation with more than 75% population engaged in non-farm sector. National Sample Survey Office (NSSO) data on employment and unemployment have already highlighted the fact that the period after 2004-05 is the first period after independence when absolute number of workers in agriculture declined. The decline between 2004-05 and 2011-12 was around 35 million workers who moved out of agriculture into non-agricultural occupations. While rural areas accounted for bulk of the increase in non-farm employment, a significant majority of them have also found jobs into these urban peripheries.

Recent literature has acknowledged the role of small towns and urban peripheries in creating jobs and contributing to poverty reduction. Lanjouw and Murgai (2014) suggest that urban development contributes more to rural poverty reduction if urban economic growth arises from the small and medium towns than the big metropolitan areas. 12 Gibson, Datt, Murgai and Ravallion (2017) provide similar evidence using night light data and conclude that urban growth on the extensive margin, rather than the intensive, matters the most for rural poverty reduction. One of the ways growth of small and medium towns have helped in rural poverty reduction is through the expansion of the structure of opportunities in rural areas by pulling labour from the hinterland but also by creating opportunities in the rural areas themselves. Chaterjee, Murgai and Rama (2015) suggest that small towns have contributed significantly more in generating non-farm employment compared to large cities. Data from Census 2011 also shows that 48% of all workers engaged in activities other than agriculture and household industry are commuting to 2 kilometres distance and more for work. Almost 30% of these rural workers are commuting to more than 5 kilometres distance to work.

Most of these trends at the national level are also visible in the case of Palanpur. The growth of neighbouring towns has been the fastest in the last two decades. All the major towns/cities around Palanpur have shown a growth rate of population at 3% per annum or more, significantly higher than the rate of growth of rural population at 2%. The growth of these towns has also led to demand for manual labour in industries associated with construction and infrastructure improvement. In the Table 3.4 we can see the places of work for migrants and commuters from Palanpur in 2015. The locations in the columns are ordered by distance (from the closest village Bilari to other states, in the between Chandausi is the closest town, Moradabad is the capital of the district and "Others into the district" mostly indicates the kilns sites located in the district, see Figure 3.4).

¹²The argument flows from close connectivity between secondary towns with rural hinterland and therefore larger impact on rural poverty.

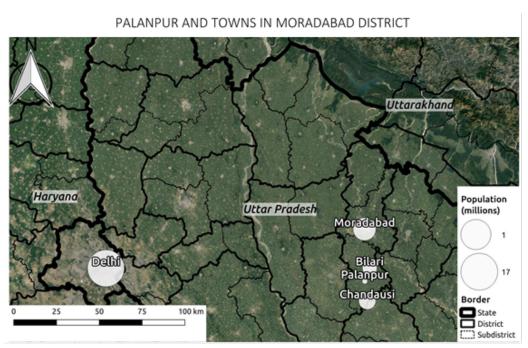
Migrants mostly move inter-state (according to the narratives collected in Uttarakhand, Bihar, Himachal Pradesh and Punjab), almost 22% of them live in the worksites close to the kilns where they work for the duration of the season or in buildings close to the industrial area. 15% of them live in Delhi. For commuters, intra-district is the main stream of mobility. More than half of them work in Chandausi, a town with population of 114 thousands inhabitants (Census, 2011), located 13 km from Palanpur and connected by train with the village. Chandausi is an important market pole for stone polishing, which is a sector that absorbs most of the casual labourers from Palanpur. A well-established network of contractors is developed in Chandausi, and most workers are introduced to them through other workers within the village.

Table 3.4: Work place of migrants and commuters in 2015 (%)

	Commuters	Migrants
Bilari	8	6
Chandausi	56	4
Moradabad	17	9
Others into the district	17	22
Delhi	0	15
Other Districts	1	13
Other Statea	1	30
Not defined	47	50
Total (%)	100	100
Total (freq)	156	93

Moradabad, the capital of the district, and Sambhal are the two other towns where stone polishers from Palanpur seek employment. But if it's possible to commute daily to Moradabad by train, Sambhal is too far and require migrating. Moradabad, where almost 17% of the commuters' work, is located 30 km from Palanpur and it counts 880 thousands inhabitants. In Moradabad there is a big mazdoor mandi where workers from all over the district can come and find employment in various construction sites and brass manufacturing units. Commuters from Palanpur are mostly regular government and private companies' workers who prefer to commute to Moradabad instead of moving there. Pramod, working as a security guard in Moradabad says: «From Moradabad it is easy to come to Palanpur in case of need. Any

Figure 3.4: Map of the main towns in Moradabad district absorbing migrants and commuters from Palanpur



Notes. Distances: Bilari, Chandausi (within 20 km); Moradabad (30-50 km); Delhi (200 km). Credits: Alexandre Cebeillac (UMR IDEES, Universitè de Rouen)

	Train		Public bus		Tempo		Tempo+bus	
	Cost	Time	Cost	Time	Cost	Time	Cost	Time
Bilari	5	10	n.a.	n.a.	10	20	n.a.	n.a.
Chandausi	5	15	20	30	20	20	30	50
Moradabad	10	40	25	45	25	30	35	65

Table 3.5: Fares and time of travel to main towns by different means of transport available from Palanpur

Notes. Time in minutes, cost in rupies. Tempo is the local shared taxi (i.e. auto-rickshaw).

other places may be more expensive and far away from Palanpur»

Finally, 14% of the commuters work in brick-kilns located in villages and small towns like Bilari and Chandausi within 6 km radius of Palanpur. The highest number of interactions (work, market, health and education services, and credit interaction) takes place in Chandausi, followed by Bilari and then Moradabad. While Bilari, the nearest town, is not big enough to be attractive in terms of employment (38 thousands inhabitants), Chandausi, compared to Moradabad, has the advantage of the connectivity, the proximity, and the intensity of already existing interactions that make it easier to access the labour market. This observation support Zerah and Denis (2014) argument on the important role that small towns play within the centrifugal dynamic of non-farm jobs creation and the rural-to-urban spatial mobility. Workers prefer Chandausi and close areas than Moradabad because it is closer to the village and the costs of transportation are less. Table 3.5 display the fares and time of travel from Palanpur to the main towns in the district with different means of transport available from Palanpur. Chanduasi is better connected to Palanpur than Bilari, and travelling to Chandausi is less expensive than Moradabad and faster. Moreover, the trains to Moradabad are not reliable. While we were doing fieldwork in Palanpur, the only train conneting Palanpur to Moradbad was out of service for a total of five months. The stationmaster told us that, despite this exceptional stop of that line for work in progress on the rail, the trains are often delayed and canceled without noticing in advance. This has huge negative consequences on the potentiality of the train as an economic resource for the inhabitants.

Surej (26, Jatav): The thing is, this area doesn't come under industrial belt so no factories are around. People have to go to Moradabad or Chandausi. There are no affordable means of transport, no trains on time. There is not much job in the village that can employ people every

day. Work starts at 9 in the morning in Moradabad. If we to go to Moradabad, that is 35-36 Km away, for work then we have to incur fare of Rs 70 for one side if not Rs. 100.

Me: But there is train service right?

Surej (26, Jatav): If we take train then we only have pay Rs 10 but we will not be able to reach by 9. The train delays and reaches at 11. Factory wants us there at 9 am. Delayed arrival leads to denial of entry in the factory and then we have to come back home.

Lanjouw and Stern showed that until the mid-1980s, a large proportion of jobs undertaken outside Palanpur were regular jobs, and induced residential migration. There is evidence from the last surveys that the increase of casual labour is associated with the increase of commuters. Mukhopadhyay (2011) analyses the determinants of migration and commuting in Palanpur at the individual level and collective (for different jati) for the priod 1993 to 2009 and extended the analysis of Lanjouw and Stern (1998) for the previous period.

In 2015 almost half of the total adult male population (resident in Palanpur) was holding a job outside the village. Moreover, we found that among the total adult male population born in Palanpur with an occupation outside Palanpur in 2015, 26% are migrants while 74% are commuters strongly suggesting that commuting for work has become the main pattern of spatial mobility compare to migration. In Table 3.6, we can see that in 2015, 56% of the commuters had a casual job, while only 23% had a regular employment.

Moreover, when we compare the occupational status for migrants and commuters in 2015 (Table 3.7) we observe that having a regular employment remains an important pulling factors for labour mobility in 2015, but it has dramatically decreased for migrants compare with the correlation observed by Lanjouw and Stern of regular employment with migration for work in the 1980s. The nature of regular jobs remains more or less consistent with the previous scenarios: manufacturing, bank, railways, security and education. There has been a secular rise in going out for casual manual work: in 2015 the share of migrants having non-farm casual jobs and mixed casual jobs (farm and non-farm) is important (26%) but relatively less significant than for commuters, for whom it constitutes the main employment status (55%). In order to get a better idea of the proportions we specify that the share of casual employment outside Palanpur in 2015 is computed at 78% by commuters and at 22% by migrants.

If we considered the trends observed in Palanpur as representative and generalizable to the country level, we could speculate that commuting for ca-

	1984	1993	2009	2015
Self-Employment	8	7	22	21
Regular employment	45	28	19	23
Casual manual work	45	65	53	56
Missing	2	0	6	0
Total (%)	100	100	100	100
Total (freq)	95	84	122	152

Table 3.6: Occupational status (non-farm only) of commuters by available year (%)

sual jobs constitutes the prevailing mode of conversion for a large share of the rural population. Indeed, there is evidence in the literature that an increasing mass of "mobile labourers" (Dupont, 1991) pending on short terms and irregular contracts from outside markets is forced to move circularly between the village and the towns in order to ensure his livelihood. Mohanan (2008) and Sharma and Chandrasekhar (2015) tried to estimate from NSSO survey of Employment and Unemployment (data on living place and working place of the workforce involved in non-farm sectors) the size of the commuters from rural area at the national level. According to the authors the robustness of their calculations is limited for many reasons but they are the only indicators available as of now. In 2009-2010 8.05 million rural-urban commuters have been counted (in contrast in 1993-1994 there were only 5.3 millions). In addition, 12.2 millions of workers without a fixed place have been identified; those individuals, renamed by Breman as "footloose workers" (1996), are constantly fluctuating from one place to another at the mercy of the fluctuations in the labour's demand.

3.4 Migration versus commuting

The trade off between migrating versus commuting involves issues of job opportunities, capacity to face costs of migration, preference for doing self-cultivation as secondary occupation instead of leasing out the land or doing sharecropping. Commuting has the advantage over migration of the proximity to the village which facilitates the combination of farming with other activities.

On the other hand, migration has the advantage of higher incomes, also because migrant women also work while in the village it is still considered an

	Migrants	Commuters
Cultivation and Livestock	4	0
Regular Employment	25	23
Self-employment	7	21
Agricultural Labour	4	0
Casual manual work	24	56
Missing	36	0
Total (%)	100	100
Total (freq)	93	154

Table 3.7: Occupations of migrants and commuters in 2015

offense to the honour of the family. Moreover, the labour placement agency and the brokers we interviewed in Himachal Pradesh told us that they use to pay the journey by train and the first month of accommodation of the migrants with advances on salary. Finally, the migrants we interviewed say that it is easier to save when they live outside for an entire season working regularly in manufacturing or construction sites rather than staying in Palanpur and doing casual manual work.

Me Many people also go to Punjab and Himachal Pradesh (other states far way)...

Manoj (39, Moria) Yes, if someone is going through financial crisis or some difficult situation then they go out with their family and give the land as sharecropping. While they go out, all other members of family also work. If only men go to work then their family stays alone in the village. Now that is the choice they will have to make whether they would like to go to other places to work or shall they wake up early in the morning, walk to the road and take some road transport to reach Moradabad. They may have to incur higher cost on transportation because they will have to pay Rs 30 instead of Rs 10 earlier by train. The wages they can get doing mazdoori (casual manual work) would be around Rs 300. Let's say they will spend Rs 100 a day (paying fare and meal) but still they will have Rs 200 in hand. However, the expenditures in agriculture and at home will let no possibility for saving anything.

Migration can be risky, and it has high costs, the opportunities to get a

regular job are rare. Commuting has the advantage of avoiding living far from the family in very poor and uncomfortable conditions. Hence, the patterns of migration, the reasons of return and the desire to move again in search or in response to new opportunities have an important subjective dimension that can be grasp only by a qualitative investigation.

Yunus, (44, Saifi) uses to get short-term contracts in different places: Delhi, Lucknow, Ambala, Alighar etc. He earns enough to cover his basic expenditures in Palanpur where he prefers to live and alternates casual manual work outside the village and agricultural labour inside. He says «It is better to live here comfortably than working hard outside (...) when I work there (he refers to Lucknow) my life is just hard working days and short sleeping nights».

Migration, in the stories of the interviewees, comes often with hard working conditions and a lower quality of life. Banney (22, Jatav) complains about the pollution in Lucknow: *«The air is very smokey in the street so I can't stay there»*. Pramod, (31, Gadaria), spent six month in Moradabad with his family doing casual labour also complains of hard work and restrictions of urban society. Ramesh (25, Pal) works as a seasonal migrant in agricultural labour and like many other workers complains about the very poor life conditions on the working site: *«Living facility is not good. 8-9 persons live in a room like cattle»*.

Harichandra, (32, Moria) was freshly back in Palanpur when we met him after having spent one year in Delhi where he worked in a construction site. He decided to come back and dedicate himself to cultivation: «I got tired of doing cooking, cleaning and all the housework after returning from work». Harishandra explains us that if his wife could have gone with him to assure the domestic duties he would probably have stayed longer but his wife did not want to follow him because of the tent-life in the camps. Harichandra intends to work now sometime in MGNREGA, he considers his income enough to cover his expenditures and he did not regret to have come back, he wishes to never migrate anymore: «In Palanpur I have a mental satisfaction from living with family and performing cultivation in peace».

It is almost impossible to get integrated in the urban and peri-urban areas where most migrants working in construction sites and manufacturing camp close to the work sites or the labour mandi. Lakhpat, 55 years old, referring to his life in Haryana where he worked for 2 years to pay back the debt for his daughter's marriage, complains: "It was too much work, long working hours. Cultural and religious activity cannot be performed there because I was all the time busy in my work. No time for any social activities in that society". The village remains the place where the social functions within the community are the most accomplished: the marriages take place in the village as well as

the celebrations for the religious festivals.

Although the main reasons for coming back to Palanpur after a period of migration are mostly employment related, the lack of new job opportunity, the end of the contract or the failure of the business, the reverse migration is also seen as a personal choice motivated by social and familial reasons, health issues and preferences related to the conditions of life and work. Reverse migration is sometimes also seen as deliberate strategy to work hard during young age to create enough capital for survival during later part of life in village. Dorilal, (42, Moria) has spent five years in Haryana with his wife, son and daughter. He had a regular agricultural employment before deciding to come back in Palanpur where he dedicates himself at cultivation. He says "I became too old for regular long hours working, here I am performing my cultivation. Sometimes I work in MGNREGA which is not such a heavy work. My son is working in Delhi and earning money; debt is already paid now. I don't feel any need to go anywhere for work. Income from cultivation is sufficient now".

The high cost of living and the unfamiliar and sometimes hostile urban milieu also forces the workers to keep themselves tied to the village economy. The importance of maintain village ties while economically connected to the outside emerge from the insecurities of urban informal labour market but also social and cultural ties. The village is the locus of the strong ties, these ties constitute a support and a security valve in case of failure. The attachment to the original rural life sometime becomes more vivid with the experience of migration: *«Motherland is more satisfactory than outside: new places, new people, this is not peaceful !»* says Ramphal (40, Jatav) after having run a small business of street snacks for seven months in Punjab.

The choice of migration of commuting is also influenced by the role of the networks which are related to the recruitment process. According to the kind of networks the one develops and the diversification of the ties, the chances to access better opportunities outside Palanpur might increase considerably, which in turn have an effect on the collective patterns of spatial mobility.

3.5 Networks and mobility

Most outside jobs, recruitment is through a middleman or contractor who is often known to the job seekers and may belong from the same village. These contractors pay advance to migrants leading to a vicious cycle of earning from seasonal employment to repay debts. In the informal context debt bondage is widespread as a manner to lock the workforce for the duration expected by the employer. While this was common in case of brick kiln

work, some instance of it was seen in casual manual work in Moradabad, and among factory workers in Himachal Pradesh also. Contractors usually recruit among their close networks, where trust and reputation compensate for the absence of formal contract. As a result, the flows of daily or seasonal workers appear to work as homogeneous social channels sharing various common characteristics, such as provenance, religious community and caste with the contractors. Lanjouw and Stern (1988) showed that in 1984 a large proportion of jobs undertaken outside Palanpur were regular jobs and that these jobs require connections that were therefore concentrated among particular castes. The qualitative information concerning the link between caste and spatial mobility, collected in the interviews, reinforce the observations of Lanjouw and Stern (1998) and Mukhopyadhyay (2011). Beyond the influence of social norms and individual socio-economic characteristics, outward mobility is strongly influenced by the networks.

In fact, more than 50% of the migrant respondents declared having received help at the moment of the migration for getting a job or receiving accommodation, loan or food, a majority of them from family of caste members. On the demand side, network impacts trajectories, individually and collectively, in different ways: the transmission of information resource that presents individuals with opportunities such as vacant jobs; the influence and active support helping individuals to gain employment through references, loans or accommodation assistance; or, finally, as a channel for the transfer of knowledge, know-how, abilities and behaviors (Barbieri 2003).

In particular, we find evidence of the important role of the brigdge network in the access to information or an attractive opportunity. The experiences of mobility motivated by a weak ties seem to have a better return on individual mobility (Granovetter 1973; Burt 1992) than through a bond link in the familiar network. At the collective level, the caste's network seems to play an important role for the spread of opportunities in some groups more than others. The exploitation of bridges allows some individuals to accumulate specific skills such as those of marble polishing or motorbike repairing. They usually exploit their knowledge by establishing these small business units within the village, at the same time transfer of skills by these individuals to others within their caste or kinship networks has helped in the expansion of these units in the village.

3.6 Conclusion

Recent decades have seen greater integration between Palanpur and its neighbouring urban areas, as a result of the occupational transition, the markets

interlinkages, the diversification of the networks and the increased connectivity. The greater integration of the village population with outside markets is partly a result of the structural transformations of the village economy with the recent decline of agriculture as a primary source of livelihood and the need to multiply the activities at the household and the individual level.

The transition from farm to non-farm occupations has mostly consisted of the expansion of casual labour and self-employment in the construction sector and related services. These occupations, which concerned almost half of the total working population in 2015, are located outside Palanpur and thus require to step out. The evidence resulting from our analysis of the spatial mobility in Palanpur shed light over the trend observed at the country level of a surprisingly low rate of internal migration for work, compared to other developing countries. The official definition of migration, used by the national surveys, does not cover all the forms of cyclical, short-term and seasonal migration which do not necessarily imply a change of residence. In Palanpur, although migration of the whole households appears to have only marginally increased compared to earlier decades, the rise of commuting and short-term cyclical migration has been much more consistent. We define commuter someone who stay outside Palanpur for work up to three months without changing his residence.

Until 1984, most of the opportunities undertaken by villagers who looked for jobs outside Palanpur were regular employment, in private companies or service sector, and thus induced the whole household migration and the change of residence. But since the early 1990s the regular employment has not been able to regain its importance in the village economy. In contrast, we find evidence of the increase of casual labour and the increase of commuters. These two patterns of occupational transition and spatial mobility are interlinked, and they have become the prevalent alternative to farming. The prevalence of commuting over migration is partly the result of the fluctuations in the labour markets and the scarcity of regular employments but it might also be preferred in order to benefit from the proximity with the village which is the locus of the strong ties. In fact, despite some advntages of migrating rather than commuting (i.e. participation of the women to work, salary advances, regularity of work and possibility to make more savings), the narratives we collected among migrants who decided to come back to Palanpur after a period of migration highlight the difficulties, the uncertainty and the risks related to the migration experience. The main destination of the casual labourers are the small and medium towns located in the vicinity and better connected to the village. Commuting is also the option chosen by the marginal farmers who do not have the possibility to rely on other members of the household for looking at the cultivation during their absence. This

is particularly the case of nuclear families who partitioned from the joint household.

Moreover, the kind of networks that one develops also play a role in the decision to migrate or not. Migration is costly and risky and the access to better opportunites outside Palanpur often depends on the quality of the social ties. Indeed, spatial mobility does not necessarily entail opportunities for social mobility (Srivastava and Bhattacharya, 2002; Lerche, Guérin and Srivastava, 2012). A large part of the rural workers in Palanpur is constrained by push factors to seek for non-farm outside jobs which are most of the time irregulars and precarious. Breman (2013) talks about "horizontal mobility", he argues that the rural non-farm workers constitute de facto a mobile and flexible workforce which suffers from economic and social vulnerability. The link between the structural transformations of the economy and the creation of opportunities for social mobility is under observation in the next chapters of the thesis.

Chapter 4

The class schema: concepts and distribution over time

4.1 Introduction

The concept we want to measure in Palanpur is social mobility in terms of movements of individuals between different social positions, or class. We aim to look at horizontal and vertical movements, during the individual life-course and between generations (from father to sons) across the class structure. The measurement of social mobility involves defining a consistent schema of the social classes composing the society. Following the theoretical debate on the agrarian class structure in India, discussed in the review of the literature, we could define the class schema in Palanpur according to different criteria: the ownership of the means of production, the land tenure and the size of land owned, the relationship between employers and labourers, the income level and the social status. In the first section of this chapter, we discussed the concept of class, we analyse the pros and cons of each possible criterion of classification, and we present the class schema we defined to the purpose of capturing trends and patterns of individual social mobility in Palanpur.

The 7-class schema we defined lies on a classification of the market and the work situations of different groups occupations: "we combine occupational categories whose members would appear, in the light of the available evidence, to be typically comparable, on the one hand, in terms of their sources and levels of income and other conditions of employment, in their degree of economic security and in their chances of economic advancement; and, on the other hand, in their location within the system of authority and control governing the process of production in which they are engaged" (Goldthorpe 1980:39 and 1987:40). Some intermediate occupational categories, like man-

ual workers and self-employed, are more complex than other categories to classify according to the criteria mentioned in the definition of Goldthorpe, because of blurring boundaries and high variability of situations.

In order to identify different classes, beyond the categorization of different occupations using the information available from the surveys, we also develop a detailed analysis of the internal organization, the system of payment, the contractual relations, the degree of autonomy, the regularity of work and the working conditions of the three main sectors of occupation in Palanpur, namely brick manufacturing, marble polishing and porter service in railway yards. Distinguishing a daily wage worker from a self-employed in these sectors is not exactly an easy task in a context of high informality and labour fluctuations.

Our analysis is mostly based on the interviews, and the ethnographic notes carried on fieldwork and take into account the class self-representation of the respondents and the vernacular categorisation of the occupations. In the second part of the chapter, we study the correspondence between class and income levels, and we give an account of the changes in the class distribution from 1958 to 2015.

4.2 Definition of class

The occupation itself does not form a class; there are several ways of classifying occupations into different categories. In our view, different social classes are defined by groups of individuals who share similar life chances, which are determined but the individuals' position in the labour market (i.e. market situation). The market situation indicates the level (i.e. quality and quantity) of material resources (income and property) and immaterial resources (economic security and chances for economic advancement) that one has. However, similar classes are not only equivalent to similar market situations alone. They also depend on a similar work situation (authority and control over the resources and the production) and employment relations (the nature of the employment relationship). The definition is inspired by Golthorpe's theory of social stratification. But, as Vaid argues in her last book, the Goldthorpe's schema cannot be directly applied to India as it was created and tested specifically in industrialised countries. Blindly applying a Western schema, it would "show a warped picture of the divisions in Indian society" (Vaid 2018 p.117), and even more in rural societies where the agricultural sector still accounts for half of the working population and thus should be looked through the specific lens of the agrarian division of labour.

Lanjouw and Stern (1998) made a first attempt dividing the population

of Palanpur into groups of households with common economic interests and a shared position in the economic system. They identify different bases of common interests at the household level and analyse the consistency of each criteria to formalise the social stratification of the population. They first consider a classification based on the employer-labourer opposition and they define four different classes: employers, who only hire in labour; labourers, who only sell their labour power, employer-labourer, who both hire in and hire out, and finally a class of "non-participant" who neither hire nor hire out. The last two categories of employer-labourer and non-participants, which are the most problematic to define with enough consistency, concerned only a third of the population in 1984, while two thirds of the other households fell into the main division between employers and labourers. If the cutting edge between employers and labourers was relevant in the context of the 1970s-1980s, when Palanpur was essentially a small-farmer economy and a substantial proportion of households were not regularly involved in casual labour, this dichotomous schema of social division is not acceptable for the subsequent periods characterised by a profound change of the occupational structure, the diffusion of casual non-farm labour and the complexification of the employment relations.

Indeed, if we applied the same schema for 2009 and 2015, we would find that the category "labourer-employer", which was already considered as ambiguous by Lanjouw and Stern (1998), will include the largest portion of the working population. To test the relevance of their class schema, they divided the population on the basis of the land ownership, and they studied the association of class with landownership. However, they found that there was not a systematic association between tenancy status and class and, the relationship between land ownership and employment status was far from They also argue that landownership was a weak predictor of economic status in Palanpur. Hence, landownership alone had to be rejected as a valid base for a valid schema of social stratification. As a further test, they studied the incidence of poverty in the four classes of employment relations. They provide evidence of the poverty level being associated with their class distinction, with the labourers at the bottom of the poverty scale and employers at the top. They also found a broad congruence between caste and class reflecting the social reproduction of the agrarian relations along the caste hierarchy. However, none of the criteria of social and economic division they identified for validating the class schema perfectly overlap with the others. They conclude saying that "identifying a fundamental division of society into well-defined classes raises conceptual problems" (1998: 38) and the classification based on the employer-labourer division, did not lead to a neat partition of the village population into classes. In fact, some heterogeneity remained within each class of employment status and, the position of employer-labourers and non-participant were too ambiguous for accepting this schema.

Starting from their considerations and other examples of class analysis we found in the literature, we argue that multi-dimensional criteria of differentiation should be preferred to define classes reasonably homogeneous with relatively clear boundaries, rather than a uni-dimensional schema. Taking in account the interplay between different dimensions has the advantage of providing more comprehensive and less arbitrary criteria of differentiation, which are not only relevant for the observer but also in the perception of the population observed. Let us take for example a stratification scale based only on income: the observer can decide to place in the lower strata all individuals or households that earn less than a certain amount, in the intermediate strata those who earn a bit more and on the top strata the others who stand above the upper threshold of average strata. But the fact that the observer draws the line between the bottom strata and the average one at the turn of that specific amount is not based on any sociologically relevant difference but is fixed, to some extent, arbitrarily.

Besides the lack of sociological consistency of using only the income level to identify different social positions, the income-based stratification is thought to have significant limitations due to problems of reliability (income is a sensitive data and respondents could be reluctant to disclose it) and income fluctuations. The information on income in Palanpur, has been collected with great care, coupled with concerted efforts to check and verify the different sources of income at the household level. Despite the accuracy of the income data, there are some possible bias and limits.

First, the information on income is not available for all survey years. Second, considering the long-time intervals between survey years (approximatively ten years) and the relatively small size of the sample, it is challenging to tell whether changes in per capita income are due to real economic mobility, transitory income shocks or measurement errors (Lanjouw and Stern 1998:176). The measurement of income and its change over time presents some difficulties; many of which are especially severe for agrarian economies. In Palanpur income is estimated as the total returns to land, labour and other household assets, but as Lanjouw and Stern (1998) said, they could not capture income perfectly and measurement errors are expected to be high. One of the most significant consideration to take in mind when dealing with comparisons of income and output from agriculture is the influence of climatic conditions and price variations related to it. Frost, pests of poor rains can dramatically affect the quality and the quantity of the harvest with negative consequences for the yearly income of farmers. This effect creates

a distortion when the economic status of farmers is compared with households who earn from non-farm activities. Moreover, moneylending, which is an important source of income for landlords in the rural economy was not adequately covered in the survey years. Due to the sensitiveness of the information, it is very difficult to get the real amount of the total interests earned by moneylenders.

Third and maybe the main problem for the analysis of the individual mobility: income is calculated at the household level as a whole and thus per capita estimation is a mean value highly influenced by the demographic characteristics of the household, in particular fertility and life-course effects. The existence of economies of scale and the absence of information concerning the intra-household distribution can potentially bias findings and their interpretation. A similar problem arises when dealing with land ownership from secondary data for rural India (for example, from the National Sample Survey). However, in Palanpur we have access to accurate and consistent land ownership data for each survey, documented by a great deal of information on the causes of change in land ownership. The land size has been systematically cross-checked with administrative records¹ and physically verified by research assistants in some survey years.

Nonetheless, we have valid reasons not to use the criteria of landownership to differentiate social classes. We argue that ownership of land is a highly inadequate predictor of economic status in Palanpur, mostly because of the diversification of occupations that has taken place over the survey period. It is quite common, for instance, that an average landowner works partly in his own farm, performs agricultural labour at harvest time, and uses to get casual non-farm jobs in the urban surrounding during the slack season. Since 2009, two-third of the households have had three different occupations and some of them hold up to as many as seven different occupations where agriculture tends to become a subsidiary source of income and farming is performed in the spare time.

Furthermore, Lanjouw and Stern (1998) provided evidence that in the 1990s there was no more association between land-ownership and employment status. Their finding is particularly consistent with the expansion of salariat employment occurring in the 1980s among both the wealthy households as well as landless households and marginal landowners. They also argued that employer-labourer relations cannot be deducted from land tenure because even small cultivators often need to hire labour at some time of the

¹The gram vikas Adhikari (village development officer) is in charge of drawing up a list of eligible households for inclusion in the poverty alleviation programmes, based on a survey of all households in the village, including landholding informations.

year for specific tasks, like harvesting. This aspect has been extensively discussed by Rudra (1988) who showed that tenancy status is irrelevant as a criterion of class identity in rural India. Another limitation is related to the fact that land ownership and landholding size are calculated at the household level, but the control over the land is *de facto* not equally distributed among members of the household, so then estimations of per capita landholding are necessarily biased. Finally, we found a positive correlation between landholding size and household size (see Chapter 2), which, if it is not carefully considered in the estimation of classes of landholding, gives a wrong impression of the extent of inequality between households.

Instead of land ownership and income, we consider occupation as the main criteria of differentiation. Information on occupation is available for every survey year and is reported in detail as well as in aggregated categories. For each survey, the data have been collected on the total population of male adults. Data have been carefully scrutinized and cross-checked. Questions on occupation (working status and employment) were generally included in a specific schedule of the questionnaire, but complementary information are also reported in some supplementary schedules. Even if the level of detail, the quantity and the quality of data collected on occupation varies over almost every survey, we manage to have data for each activity conducted by adult males in the 12 months preceding the survey. The final occupation status is a derived estimate of all these data and not a direct response from the respondent, which is a good point to avoid biases. In the semi-structured interviews, we carried out in Palanpur we noticed that most of the respondents tend to initially identify themselves in a profession which does not correspond to their real primary occupation (further questions allowed us to clarify the real occupations).

In particular men aged 40 to 55 years old identify themselves as kisan (farmer) when they are asked what their work is, but they actually do not necessarily spend the majority of their time doing farming. Time-priority criterion has been followed to assign the primary occupation. As a consequence, high fluctuations are not captured (Himanshu, Lanjouw and Stern 2018:246); for example, an individual working five months a year as self-employed and seven months a year as a farmer will be recorded as mainly farmer. However, in these cases, self-employment is reported as his secondary occupation. Information on secondary occupations are systematic in recent survey years but less reliable for previous ones, probably because performing pluri-activities was less common. In fact, in 1993 less than a quarter of the total adult male population held a secondary occupation but in the last two surveys, the share increased to more than 40%. It is worth mentioning that in 1993 more than half of the secondary occupations were non-farm, and farm

occupations were mostly agricultural labourers while in recent years in 80% of the cases secondary occupation is cultivation and livestock. This evolution shows how farming has become an auxiliary economic activity. Data on tertiary occupation have been omitted from our analysis because they are not consistent and there are a lot of missing data.

4.3 The class schema in Palanpur

The definition of the class schema in Palanpur is partly based on the conceptualization of the EGP 11-class schema (Erikson, Goldthorpe and Portocarero), which has become a standard schema for social mobility studies, but also by pragmatic considerations about the availability of data and their quality. In fact, to construct a refined class schema as EGP, details of the occupation, information on the self-employment and employment relations of people holding the occupational positions is essential (Ganzeboom and Treiman, 1996). Not such a vast range of details are available for each survey year, especially the earliest ion 1958 and 1963 miss such detailed level of information. However, we managed to get at least a list of detailed primary occupations including information on the nature of the occupation (e.g. farm versus non-farm), the economic sector (e.g. marble polishing or public service) and the contract. Information on contracts is mostly about the employer whether it is in private or public sector, and the indicative duration term even if the contract is informal. In fact, most non-farm occupations fall in the informal sector and are characterized by lack of formal agreements and almost no social security benefits. For this reason, in many cases is difficult to distinguish self-employment from daily wage work. Additional information on the type of employment relations are available in supplementary schedules of the questionnaires, but not always satisfactory. To fill the gaps in the available data, we endeavoured to track back the assistants of previous surveys and ask them clarifications, as well to read their notes and comments.

A consistent part of our research consisted of annotating all the ambiguous cases and other discrepancies emerging from the data. Whenever consultation of previous field assistants was not enough to elucidate those cases, we asked clarifications directly to the respondents in Palanpur or members of the family if the person concerned was not present during our stay in the village for fieldwork. Finally, the interviews constitute a crucial source of detailed information concerning the internal organization of the sector of activity, the employment relationship, the possibility of economic advancement, the income and system of payment, etc. This case by case scrutiny

would not have been possible without a deep understanding of the context and a good familiarity with the archives of the whole Palanpur study.

The two main principles that we adopted to define classes are homogeneity and structure. Homogeneity implies that within an aggregate of occupations, there are no barriers between any origin occupation and any destination occupation. Structure refers to the pattern and strength of the barriers between origin and destination classes (Luijkx 2017).

We identify seven classes: large farmers, middle farmers, agricultural labourers, high salariat, low salariat, self-employed and manual workers (see Table 4.1)

Firstly, we distinguish farm from non-farm occupations. In the literature, agrarian classes are generally defined according to the ownership and control by households of the means of production (particularly land); the agriculture production relations and the surplus that a household is able to generate in a working year. Instead of this Marxist approach, we favour an approach by market situation and work situation as per Goldthorpe definition. The employment relations have been changed dramatically over time, from patronage to market transactions, and thus their sociological relevance over the whole survey period is questionable. We look at primary occupation as the main criterion and we distinguish cultivation and livestock from agricultural labour. The former implies some land to be owned and self-cultivated while the latter concerns exclusively landless people. Among these categories of occupation, we define three different classes according to the size of landholding and the status linking the farmer to the land: ownership, tenancy or labour. Landholding is not measured per capita because the control over the land remains concentrated in the hand of the head until the household remains joint. However, the size of the household landholding is highly correlated with the probability for the household members to be involved in cultivation and livestock. Hence, we consider the total amount of land as a common asset to each adult male living jointly. There is some arbitrariness in the boundaries between classes because they do not take in account the quality of the land owned but only its size. Data on quality of land are not available.

Table 4.1: The class schema in Palanpur

CLASS	Occupation	Details	EGP correspondence	
Large farmers	Farming	Large landlords and cultivators owning minimum of 25 bighas	I. Large proprietors	
Middle farmers	Farming	Farmers and cultivators owning less than 25 bighas and or leasing in more than 25 bighas of land.	Vc. Self-employed farmers	
Agricultural labourers	Agricultural labour	Agricultural labourers and small tenants cul- tivating less than 25 bighas.	VIIb. Agricultural labourers	
High salariat	High professionals (public/private)	Teachers, doctors, compounders, state officials, supervisors.	II. Higher professionals and managers	
Low salariat	White collars and factory workers (pub- lic/private)	Railway workers, guard, peons. Regular employment (monthly, seasonal or long-term contract).	II. Lower professionals and managers; V. Lower-grade technicians and manual supervisors; VI. Skilled manual workers; III. Routine non-manual workers	
Self- employed	Self-employment	Artisans and petty business. Tractor driver, pop-corn seller, marble pol- isher, carpenter.	IVa. Small proprietors with employees; IVb. Small proprietors without employees	
Manual workers	Manual	Masons, porters, brickmakers, MN-REGA jobs. Casual employment (daily or weekly contract).	VIIa. Unskilled and semiskilled manual workers	

4.3.1 Description of classes

Large farmers

The class of large farmer corresponds to the large landlord households who own the most land and generally the best land in the village. As mentioned elsewhere, Palanpur, in terms of agrarian relations, is essentially a small-farmers economy and even the large landlords can hardly sustain investment costs and price fluctuations without complementary sources of livelihood. However, even where agriculture is not the primary source of income, land is still an important factor of social power. Large landlords tend to not participate in farming, but to lease out on fixed-cash rent (pehsgi) or to make sharecropping (there two possible arrangements: half share called batai or a quarter share of the harvest called chauthai) their land, and to hire agricultural labourers.

We define large farmer as the individuals belonging to a household owning twenty-five bigha of cultivable land and who are themselves primarily involved in cultivation and livestock activities. Landholding is not measured per capita because the control over the land remains concentrated in the hand of the head until the household remains joint. However, the size of the household landholding is highly correlated with the probability for the household members to be involved in cultivation and livestock. Hence, we consider the total amount of land as a common asset to each adult male living jointly. Many landlords leasing out their land spend most of their time doing farm business activities like supervision of tenants, grain mills, petrol pumps, lodging houses, transport, the sale and lease of agricultural machinery, etc. and thus we consider they are involved in cultivation and livestock. In contrast, An individual belonging from a family of large landlords but being primarily involved in occupations other than cultivation and livestock are not considered as large farmer.

Middle farmers

Middle farmers belong to peasant households who lie between large landlords and big farmers on the one hand and agricultural labourers on the other. They usually work on all of the agricultural operations in their land and hire additional workers only for an extraordinary charge of work, for instance, harvesting. According to our definition a middle farmer's household own necessary some land, but less than 25 bighas. Big tenants are also included in this class. Cultivation and livestock is the primary occupation of middle farmers.

Agricultural labourers

At the opposite pole of the spectrum of agrarian classes, there are agricultural labourers, whose major income comes from working as hired workers in the land of others. They are all landless but some of them lease in or share a small amount of land. In general, agricultural labourers work on a wide range of tasks, but the demand is higher for sowing, harvesting weeding and ploughing. Some labourers get specialised in specific crops and take seasonal contracts outside the village. Except for migrants, who are paid weekly or for the entire season, agricultural labourers in the village get daily wage contracts, around 200 rupees for men and 150 rupees for women and children; plus, a meal is often provided to daily workers. Also, piece-rate contracts exist but are less common: a labourer is paid a given amount per task completed, for example, 5 rupees per bigha for weeding a plot of land. In the past, for harvesting wheat, the labourers were paid only on cash crops (one-twentieth of the amount harvested), in recent times the wage is a combination of both, cash crops and money, and the labourers have more flexibility to ask for a preferential ratio.

The class distinction of the peasantry in Palanpur is very similar to the Kumar and Heath schema (Kumar, Heath and Heat 2002). In their schema, they separate agriculture from the other classes and subdivide farmers with more than five acres of land (equal to 15 bighas) and small farmers and agricultural labourers. In our case, we choose to fix the boundary between large farmers and middle farmers at 25 bighas because it corresponds to the minimum average value of the top quartiles of land owned per household for the whole period (see Chapter 2 for details on land ownership over time).

Coming to non-farm occupations, we distinguish four different classes: salariat high, salariat low, self-employed and manual worker. Salariat jobs are relatively easy to identify from the information available in the data: the employer is specified if is the government or a private company and the salariat nature is indicated with the mentions "regular job" or "wage job". In fact, the two main conditions characterizing a salariat job is the wage and the regularity of the employment. When a wage job is not regular, it is generally recorded as "daily wage job" or "casual work". However, the distinction between these two categories of occupation is not always clear, as Jean Dreze noted down during the survey of 1983: "The distinction between casual labour and regular or seasonal labour is not a rigid one, but in many cases, it is intuitively clear and therefore we have applied it informally".

Himanshu (2011) gives a useful nuance defining regular employment a wage job based on a monthly contract and offering a basic employment

security, as opposed to daily wage payments in the casual sector with no protection at all. We adopt this criterion to distinguish salariat from manual work. Besides, we examine complementary dimensions of differentiation emerged inductively from the information collected in semi-structured interviews and additional informal discussions we had in Palanpur while doing fieldwoks. The qualitative information extracted from the interviews allow us to identify four terms of comparison which were systematically used by the respondents to describe different occupations: regularity (in time), security (nature of the contract), quality (work conditions, work environment and reward) and skill level (qualified versus unqualified). The main terms of comparison emerging from the vernacular categories of occupations are service contracts versus casual work, manual versus non-manual work, dirty versus clean job (this distinction refers to criteria of purity associated with the occupation) and regular job versus irregular.

Vernacular classification of occupation categories

NAUKRI VERSUS MAZDOORI

Naukri means service job, office job, and is commonly used to qualify a wage regular job, mainly with a formal contract and involving skilled non-manual tasks. In the common sense naukri is often opposed to mazdoor, which designates casual daily job, always informal, manual and generally unskilled.

DIMAG KA KAM VERSUS MEHNAT KAM

Dimag literally means "brain" and the expression "dimag ka kam" means "brainy work". It is used in correspondence of cognitive non-manual jobs, generally performed in urban settings, mainly in the service sectors, and always involving high education and the use of some technology. Alternatively, "computer ka kam" (computers work) is sometime used to describe similar jobs, as opposed to "mehnat kam" which means "hard work". Mehnat is a common qualifier of physically hard jobs, like for instance porters or masons.

GANDA KAM VERSUS SAFAI KAM

Ganda literally means "dirty" and safai means "clean". These adjectives are very often used to roughly distinguish manual work from non-

manual work. But, if safai is used for non-farm jobs like shopkeepers, compounders, teachers, officers as well as farmers, indistinctly, because the own land is not "dirty", ganda is an attribute systematically used to describe jobs predominantly performed by lower castes. In Palanpur ganda kam is always used to qualify brick-kilns jobs, a sector involving exclusively Jatavs from the village. And the Jatav themselves, when they were asked by us why members from other castes do not work in brick kiln happen to answer "because oithers do not ewant to do ganda kam". Hence, this disctinction seem to hide residual prejudices of purity and pollution resulting from the ritual status of the caste.

PAKKA KAM VERSUS MAZDOORI

Pakka literally means "burnt", by extension it is used to indicate something "complete, sure, certain", in particular between two parties agreeing on something, it means "deal". People in Palanpur, talk about "pakka kam" in case of "agreed" work, regardless of the nature of the contract, if any, formal or informal, oral or written, it implies a certain regularity in time. While mazdoori is commonly used to talk about daily workers. For instance, pakka kam denotes the capacity to get a "thika" contract with money advances, which differentiates a mazdoor from a tikedar (contractor).

A naukri job is the maximum aspirations that fathers have for their sons and the investments on educations are always motivated by this goal. Naukri always corresponds to high salariat positions, mainly in the public sector, like policeman or doctor, and some time with low salariat occupations like compounders or IT assistant. In our class schema, we distinguish high salariat from low salariat, on the basis of different skills level and economic returns. They both imply a labor contract, informal or informal, but characterized by the regularity of the work and the low level of physical involvement. Indeed, factory jobs are considered "clean" by the respondents because they do not involve hard physical tasks and they stand closer to non-manual work because of the use of machinery (i.e. technology).

High salariat

Salariat high corresponds to the class of high professionals and managers in the EGP schema. Having an occupation of this type implies a long-term contract, at least monthly, and basic employment protection. Salariat high includes all the non-manual wage occupations in both private and public sectors, requiring a high level of skills (teachers, doctors, engineers, state officials, supervisors, etc.) and ensuring high economic returns.

Low salariat

Salariat low includes wage workers, both white collars and blue collars (i.e. factory workers), performing semi-skilled tasks, manual or non-manual, with a regular contract. In the EGP schema, salariat low broadly corresponds to the classes of routine non-manual workers, lower professionals and managers, lower grade technicians and manual supervisors and skilled manual workers. In Palanpur, some of the common occupations classified as salariat low are civil servants for the maintenance of the railway line, private or public guards, school peons, shop employee, factory workers.

Self-employed

In line with the definition given by the NSSO (National Sample Survey Office), we consider self-employed someone who operated his own enterprise or who is engaged independently in a profession or trade on own-account or with one or a few partners. The essential features of self-employment is the autonomy to decide how, where and when to produce and the economic independence in respect of the choice of market, the scale of operation and the finance for carrying out the operations. The remuneration of self-employed consists of a non-separable combination of two parts: a reward for the labour and the profit of the enterprise. Self-employed can be own-account workers (for instance skilled artisans), employers (for example shopkeepers who hire one or more employees), or helpers in household enterprises. In Palanpur the self-employed are mostly skilled artisans, like carpenter and tailors; service providers, like tractor and moto rickshaw drivers; contractors for example in the sector of marble polishing; shopkeepers and street food seller.

Manual workers

Finally, manual workers are all casual workers, unskilled, performing manual jobs with daily wages and no formal contracts. They are mainly masons, porters in the railway yard, brick makers, workers in the MNREGA (Mahatma Gandhi National Rural Employment Guarantee Act, 2005, is a national program that guarantees 100 days of employment to one adult male per rural household at minimum wage). Factory workers are not assimilated with "manual workers" because, in the context observed, working in a factory provides better life chances than for other casual workers: higher in-

come, more regularity of employment, more security at the workplace, social benefits and a minimum level of protection.

However, it is not always possible to distinguish clearly a self-employed from a casual worker who sells his labour force on the labor mandi on a daily-wage base. The *labour mandi*, or labour chowk, is an informal market place, generally located at a road junction in cities, where unemployed people wait for contractors to hire them for daily jobs. Most of these jobs are in the construction sector. In terms of protection, regularity and autonomy, we observe the predominance of precarious forms of work, extendable to both self-employment and casual manual labour.

Most of the self-employed fall in the unorganised sector: they are unincorporated enterprises² or do not declare paid domestic work, they do not register their employees, and in general, they are not regulated under any legal provision and do not maintain any regular accounts. Indeed, self-employment is the largest group overall the informal workers in India (32,2% in 2016 according to International Labour Organisation). Harriss, Kannan and Rodgers (1990) pointed out, in their study on the labour market in Coimbatore, that self-employment, in many cases, should be taken in account more precisely as "marginal self-employment". They stated that some characteristics of the unprotected, irregular wage workers are shared by service workers and owners of small business, like palledari (porters) or street vendors. These occupations are unskilled, held by individuals alone or in a family joint-business where the value of fixed capital is less than 200 rupees.

According to their results, the marginal forms of self-employment generally concern little or uneducated men and women, rarely younger than 25 years old, very rarely belonging from upper castes, quite commonly from Scheduled Caste backgrounds and more likely than other workers to be migrants from rural areas. All of these characteristics are similar to those of casual workers. In order to better classify self-employed and manual workers, we make a detailed analysis of different occupation and compare a set of characteristics, by sector of activity. In Table 4.2, we show the cases of marble polishing, brick-kiln and palledari (porters): altogether, these three sectors absorb a large share of the working population from Palanpur. In each sector of activity, we can distinguish an internal hierarchy of positions: the chela is the apprentice, he generally learn from a mistri (master) in exchange of half the wage of a mazdoor. The mazdoor is an unskilled manual worker, who work on a daily-wage base for about 200-300 Rupees a day.

²Unincorporated enterprise means that it is not constitutes as a legal entity separate from its owners and it is owned and controlled by one or more members of one or more households and it is does not have a complete set of accounts including balance sheets.

Table 4.2: Classification of self-employed and casual manual workers

	Marble polishing	Brick-making	Palledari		
Location	Delhi and intradistrict	Intra and inter- district	Moradabad and Chandausi		
Positions	Chela, Beldari, Mazduri, Mistri, Thikedar	Mazduri, Thikedar	Mazduri, Thikedar, Mun- shi		
Skills require- ment	From null to semi-skilled	110111 11011 00 011011111001			
Risk level	Medium	High	High		
Payment	Daily, weekly, on contract	Piece-based	Piece-based		
Wage	200-450 Rs /day	$\frac{200\text{-}500~\mathrm{Rs}/1000}{\mathrm{bricks}}$	2 Rs / piece		
Employer	Thikedar or contractor	Thikedar or Malik (owner of the brick-kiln)	Thikedar or on labour mandi		
Internal organisation	Team of minimum 2 persons	Team of 3-4 persons (couple or full family)	Team of 10-15 persons		
Regularity	Irregular	Seasonal or weekly	Daily		
Protection	None	None	None		

Above the *mazdoor*, the *mistri* is a skilled artisan who works autonomously getting contracts from the *tikedar*, who is the contractor. Sometimes, the *mistri* is also *mikedar* and gives deals to other *mistri*. The *mistri*, or the *Tikedar* hire *mazdoori* (casual workers) for the duration of the contract or on a daily-wage basis. Moreover, there can be *beldari* (helpers) who perform the most manageable tasks like transporting cement or bringing water. They are generally paid less than *mazdoor*. Sometimes, the term *beldari* is used as an equivalent of *mazdoor*.

Marble polishing

Near about one hundred people were working in the sector of marble polishing in Palanpur in 2009 and 2015. Most of them are casual workers (daily or short-term contracts), and a few, with many years of experience and capital investment, managed to develop their enterprises. In this sector, one has to start at a young age as the apprentice of a tikedar. The tikedar is the person who gets the contracts and hires employees to do the job. Apprentices are paid around 100 rupees per day. After some time, a motivated apprentice can become autonomous and work as mazdoor (worker). Those who are not able to acquire sufficient skills and reputation to convince new employers to hire them, end up to work as beldari (helper) for the same tikedar. The most degrading tasks are assigned to the beldari, and the daily wage is less than 200 rupees. The payment is on piece-rate basis of around 7 rupees for every foot of marble polished. A mazdoor can earn up to 500 rupees, depending on the level of skills. To become self-employed, one has to buy the polishing machines (two kinds of machines are needed: a small one for finishing that costs around 10.000 rupees and a big one that costs 30.000 rupees for polishing large surfaces). A dozen of people owned the big machine in Palanpur in 2015 and were considered tikedar. They get direct contracts from contractors and work on their own with the help of some apprentices or beldari; for big contracts, they hire one or more mazdoor. The tikedar is sometimes called mistri, especially the eldest ones. Mistri is an honorific title given to artisans who have a good reputation for their high level of experience and knowledge. Generally, the *mistri* become themselves contractors: most of them do not work anymore but activate their vast network, consolidated through years of work, and find contracts that they sub-contract to tikedar and get a commission out of that. In the example of marble polishing, tikedar often have an unclear position swinging from daily wage contracts to self-employment. Where we have sufficient information to make the distinction, we classify tikedar owning a machine and mistri as self-employed, while mazdoor, beldari and chela are manual workers.

Brick-making

In Palanpur, manufacturing of bricks is a very diffused occupation. According to the most recent surveys, not less than fifty households depend on brick kilns industry for their subsistence. The industry is based on seasonal employment patterns, from October to June. Brick kilns are closed down during the rainy season because sunshine is not enough to dry the bricks before burning them in kilns. Some brick kilns are located in the vicinity of Palanpur; the closest kiln is located in the close village of Sirsi, at 30 minutes far, by bicycle, from Palanpur. During the season many people commute daily for working there. Other people from Palanpur migrate to some brick kilns far away, alone or with the whole family, where they are provided with temporary accommodation by the kiln owner.

The brick-making process consists of the following steps: preparation of raw material, moulding, drying and burning. The work is done by units of production called toli. Each toli counts 3 or 4 persons; generally, workers are organized in teams with their families and the work is divided between the members. Children and women are more likely to mix the soil and mould the bricks. Burning the bricks in the kilns and plotting them under the sunlight to dry are very strenuous and dangerous tasks and are usually carried by males. A person alone can make 500 bricks in a day if working for ten to twelve hours and a toli produces, on average, 1500 to 2000 bricks per day. Payment is on a piece-rate basis, per blocks of thousand bricks. The rate for a thousand bricks varies from 200 to 400 rupees according to the region where the kiln is located. Some specific tasks are paid less, the rate for transporting bricks in the kiln, for instance, is 0.20 rupees per brick. Wages are usually paid once a week, but the migrants receive part of their wage every fifteen days and the rest at the end of the season. When the team is composed only by adult males the payment is shared equally; otherwise, wages are paid to the male head of the household for the whole family and none of the women workers receives directly their wages.

Workers are recruited by a *tikedar* who also works in the brick kiln. In brick kiln industry there is a complex system of labour bondage to lock the labourers from one season to the next. When the season is off the brick kiln's owner gives money in advance to the *tikedar* to distribute to his and her workers. Most of them are not able to repay the debt if not by working the next season for the same *tikedar*.³ In Palanpur there is only one *tikedar* who recruits workers for two brick kilns not far from Palanpur. In 2015 he

³For more details on labour debt bondage in brick kilns manufacturing and agriculture see Guérin, Venkatasubramanian and Kumar 2015 and Breman, Guérin, and Prakash 2009.

was responsible for approximatively 20 teams from Palanpur, but he also recruits labourers from other villages. He provides to each team a saancha (frame for making bricks). Every year he receives in advance from the owners of the brick kiln around 200 rupees per thousand of bricks, which include 5 rupees of commission for him; in return, he commits to provide enough labour power to produce the number of bricks agreed. The main risk for the tikedar is that labourers run away before the end of the season at his own expenses. Compare to the migrants, the commuters can renew their contracts directly with the owners of the kilns without passing through the tikedar.

Despite the fact that seasonal work in brick kiln has the advantage of being more regular than casual daily workers seeking for job on the labour mandi, we consider all the workers in brick kiln as manual worker class, including the tikedar. In fact, in terms of life-chances both the cases are very similar: conditions of work in brick kilns are very hard and is commonly considered as a ganda kam (dirty job). Everywhere in India brick kilns are mostly associated with workers from Scheduled Castes and Scheduled Tribes.

Palledari

The job commonly called *palledari* consists of unloading sacks of cement and fertilizers from wagons in the railway yard or private storehouses. In 2009 and 2015, about twenty to thirty young males used to commute regularly from Palanpur to the railway yard in Chandausi and Moradabad. The workers usually work in a group of ten or fifteen, including the *munshi*. The *munshi* is the supervisor, he counts the sacks unloaded and organize the turnover of tasks among the members of the group. The *munshi* is also the *tikedar* who gets contracts from several contractors from the companies directly.

In a coach there are around 1200 sacks of 50 to 80 kg each; each sack is paid 2 rupees to be unloaded. At the end of the day the *munshi* counts the total of sacks and pay the group for the whole work; the payment is equally shared between the workers. The biggest difficulty for the *tikedar* is to maintain his team available despite the unpredictability of the market: some days there might be too many trains compare with the workforce available, while in other days trains are so few that only the most influential groups get contracts. Uncertainty is high and information concerning the amount of work is almost imminent. When a train is about to reach the station, the *Tikedar* receives a call from the contractor and he needs to spread the word around in Palanpur to gather very quickly enough *palledari* for unloading at least a full coach. It happens that they have to get ready in a couple of hours to not lose the contract. Losing a contract also means to lose the trust of the contractor. Indeed, *palledari* is a very irregular occupation. Competition

is also very high because it is the casual occupation of last resort for many people: refusing a call can seriously compromise the future chances to work for the same *tikedar*.

However, most of the time the quantity of sacks to unload is not specified to the *tikedar* and it frequently happens that work is less than expected so the final share per person is a little amount of money. On an average day, the earning per worker is around 150-200 rupees. The munshi gets a fixed wage of 5000 rupees per month from the contractor of a private storehouse, at the railway yard he gets a small commission per each bag unloaded by his group of palledari.⁴ Unloading heavy sacks for the whole day is very harmful to the back; moreover, cement and fertiliser are very dangerous to inhale. The workers do not get proper means to protect themselves and many of them suffer from severe lungs injuries when they go too often. Only the munshi falls in the class of salariat low and all the palledari are manual workers.

The analysis of these three sectors of activity illustrates the complexity of the organisation of work: different degrees of regularity, autonomy and protection of employment are not clearly discernible in a context where there is a multitude of informal arrangements rather than formal contracts. Another difficulty is related to the constant swinging from one position to another, which is proper to some sectors, for instance in marble polishing, from *tikedar* to mazdoor. Only a deep knowledge of the context and the occupations performed by the people in Palanpur allowed us to classify ambiguous positions with enough confidence. In particular, it was very conducive to triangulate information during fieldwork.

The procedure we followed to define the class schema meets, to some extent, the criteria of the replicability. The replicability of the analysis is granted by the detailed description we provide of the conceptualization of the class structure in Palanpur.

4.4 Income-class correspondence analysis

One of the requirements for assessing the validity of any given measure of classes is that it indexes the particular conceptualization of class structure to which it addressed with some degree of adequacy (Evans 1998:190) and the categories of the schema measure what they are supposed to measure (Heath and Martin 2012). For Evans, in order to test the validity of the schema, criterion validity is the preferred test. In our case, data on the regularity

⁴We could not obtain a clear information concerning the amount of the commission per bag but we know that earning of the thikedarby commissions on the railway yard is less than the fixed wage he gets from the storehouse.

of employment, the level of protection and the degree of autonomy are not systematically measured, but they are differently qualified using qualitative information about the occupations. We could not synthesize in single indicators valid for all the occupations the criteria used to distinguish self-employed from casual manual workers for instance. We have, at least, three more reasons for not using a test of criteria validity with the set of criteria used to define our schema.

First, classes in the farm sector are defined with different criteria than classes in the non-farm sector because they are differently located in the work situation and the market situation as discussed in the paragraph on the definition of the class schema in Palanpur.

Second, we used qualitative information from notes, interviews and direct observation from fieldwork which could not be tested statistically. Finally, we consider that testing the validity of the class schema with a criterion used to fit classes will invite tautologies. For instance, if a class schema is based on the degree of autonomy at work, among other criteria, then measures of association between this class schema and measures of autonomy at work cannot be used to validate the schema. Similarly, the use of a predictive validity test, as an alternative to the criterion validity test⁵ is risky because of spurious relations. For instance, if a class schema is based on the degree of ownership to distinguish different classes and the predictive test reveals that income is associated with the class schema, it would be unclear if the association is substantial to the class or to ownership only. Instead of testing the validity of the class schema using criteria's validity or predictive validity tests, we are rather interested in the analysis of the correspondence between income groups and social classes. Income is not part of the fundamental set of criteria we used to define the class schema for the main reason that income is reported at the household level. It is almost impossible to distinguish rigorously the amount of income deriving from each distinct sources of primary and secondary occupations for each member of the households. Nevertheless, in the classification of self-employment and casual manual workers, we use the information on wages to distinguish different market situations in each sector of occupation.

Hence, we expect a certain degree of association between income and class. In order to test the degree of correspondence between income and class, we need to verify how each category of the class schema is associated with a certain level of income. We use correspondence analysis (CA), which is a multivariate graphical technique designed to analyse contingency tables containing some measure of correspondence between categorical variables. The

⁵For an example of this test see Appendix A "Data and Class Validation" in Vaid 2018.

CA has the advantage over the Chi-square test that it does not only identify a statistically significant dependence between the variables analysed, but it also shows precisely how the variables are related. The results provide similar information to those produced by factor analysis and principal components techniques; but, one of the critical benefits of CA, for our analysis, is "its ability to accommodate non-metric data and non-linear relationships" (Hair et al. 1995: 26). Moreover, it allows for the optimal representation of a contingency table with a joint display of row and column categories in the same map, facilitating the interpretation of the relationship between rows and columns but also relationships between the categories of either the rows or the columns (Kennedy, Riquier and Sharp 1996). Finally, it has been documented in the literature that the CA works well with small data sets (Hoffman Franke 1986, Herman 1991).

In Palanpur, data on income are available only for 1958, 1963, 1975, 1984, 2009. We estimate the income per capita of working young males for each household. This measure of income is an approximation of the total income earned by the household, as a whole, and divided by the number of adult working males. The income per capita that we obtain is calculated from the mean of cumulative earnings. One of the possible bias in the analysis is that the measure we use for per capita income is sensitive to significant deviations from the average income of the household members. Still, we assume that significant deviations are not the norm in households from Palanpur. Income is expressed in deciles: from the first decile (1) of value 153 Rupees per month per capita to the top decile (10) of value 9,030 Rupees per month per capita. Classes correspond to the seven categories of our schema.

We obtain from the correspondence analysis of income and class a chisquare equal to 134 (with a degree of freedom 54)⁶ and a p-value smaller than 0.00001 (see the Table A.0 in the Appendix). This result indicates that the hypothesis of homogeneity or total independence of income and class is rejected; in other words, there is almost no probability, less than one in ten thousand, that the observed frequencies in the contingency table can be reconciled with the homogeneity assumption. We can conclude that real differences exist between income and class, with specific patterns of associations.

The level of variance in the set of row profiles (class) and the set of column profiles $(income\ deciles)$, is expressed by the total inertia of the table. The inertia is a measure of the geometrical distance of row profiles and

⁶The chi-square statistic is an overall measure of the difference between the observed frequencies in a contingency table and the expected frequencies calculated under a hypothesis of homogeneity of the row relative frequencies or the column ones.

column profiles (points in the space) from their average profile. The average profile represents the hypothesis of homogeneity of profiles: income would be equally distributed among all classes. The inertia will be high when the row profiles, or column profiles, have significant deviations from their average and will be low when they are close to the average. If there is low inertia, it means that the association between income and class is low. Conversely, the higher the inertia, the higher is the association. If all the profiles were identical, chi-square and total inertia would be zero. Considering that the maximum amount of inertia could be of value 2 at its maximum (using two dimensions), the actual level is around 5 %, which indicates a moderate association between the row and column profiles.

The results of the CA are plotted in a bi-dimensional graph (Figure 4.1). The total inertia is captured by different dimensions which explain the degree of variation of row's and column's profiles (class and income deciles). Together, these two dimensions explain more than 80 % of the total variance, so that the biplot represents almost all of the information in the residuals of class and income. The coordinates in the biplot graph correspond to the profiles of row (class) and column (income), displayed in a symmetric normalisation. The CA places the row coordinates on the plot such that the closer two points are to each other, the more similar their residuals; however, extreme caution must be used when interpreting this plot. If two row profiles are close to each other, it is correct to say that their profile patterns are similar. Still, it is not possible to deduce from the closeness of a row and column point the fact that the corresponding row and column profiles necessarily have a high association. The closer a profile is to the origin and the less distinct is from the average value (equal distribution between income and class).

Dimension 2 graduate the income levels along the y-axis: bottom deciles stand below the zero line, top deciles at the vertices above the zero line, and on the zero line the average deciles, except for decile 7, which is closely associated with the class salariat low. Dimension 1 plots low-class profiles at the left side of the zero-point, high class's profiles at the right side and middle class's profiles closer to the average (the centre of the graph). Longer lines connecting a row point to the origin indicate that the row profile is highly associated with a specific income decile. Salariat high is highly associated with the top decile, manual worker is highly associated with 9th decile amd agricultural labourers is highly associated with the lowest decile. Large farmers is moderately associated with the 4th decile and low salariat with the 7th decile. Middle farmers and self-employed are in the bottom's square of the plot, which means that their income is likely to be below the average level. However, they are located very close to the average profile, which means that

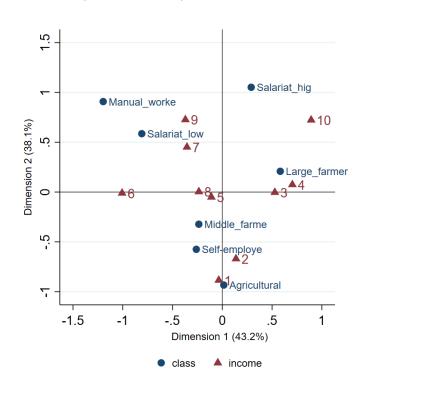


Figure 4.1: Correspondence analysis of income deciles and class

Notes. In order to identify the relations between row profiles and column profiles in this plot, we need to look at the angles formed by the lines connecting row points and column points to the origin: really small angles indicate an association, 90-degree angles indicate no relationship and angles near 180 degrees indicate negative associations.

there is a high variability of income levels among these classes.

Globally, the CA shows a moderate level of association between income and class, with manual workers and high salariat at the top of the income distribution, agricultural labourers at the bottom. Low salariat and large farmers are in the middle of the distribution showing an average level of income. Finally, middle farmers and self-employed's income is below the average level, but they do not show any particular pattern of association, which means that there is high volatility of income among these classes. These results might be considered in light of the fact that the measure of income is not univocally related, by construction, to a single occupation; moreover, individuals having pluri-activities are very diffused, and the real income per capita can be the result of multiple sources of earnings. For instance, the reason for casual manual workers to be concentrated at the top of the income distribution might be the result of multiple sources of livelihood complementary to cultivation. For these reasons, we consider sociologically more relevant, to define class on the basis of the social position rather than the economic status.

4.5 Class distribution over time

The Figure 4.2 displays the class structure in Palanpur for the adult male population across the six waves: 1958, 1963, 1975, 1984, 1993, 2009, 2015. The graph reports the share of the working population distributed across the class.

As discussed in Chapter 3, the village economy has undergone significant transformations during the period surveyed. The land reforms of the early 1950s have affected the land distribution of the subsequent years and the relations of production. Later, the technological development and the public subsidies associated with the Green Revolution, from the end of the 1960s to the late 1970s, have boosted the agricultural production and affected, on the one hand, the demand for labourers (negative impact) and on the other hand the capacity of investment of wealthy farmers (positive impact). In the last three decades, symbolically marked by the neo-liberal reforms of 1991, the diversification of the economy, from a society based primarily on agriculture, to a market economy oriented towards non-farm activities, the shrinking of the land per capita and consequently, the withdrawal from agriculture and the intensification of the spatial mobility toward urban and peri-urban economic centres, have had a significant impact on the structure of opportunities in the society of Palanpur. We observe that all the classes related to farm occupations (i.e. Large Farmer, Middle Farmer and Agricultural Labourer)

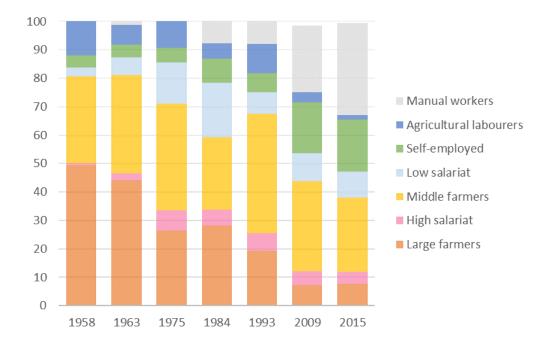


Figure 4.2: Occupational structure of adult working per survey year

have dramatically decreased: in 1958, 90% of the total adult male population, was involved in some farming as a primary activity, while in 2015 agrarian classes account for less than 30% of the population observed (Figure 4.2).

Large farmers accounted for almost half of the adult male population in 1958 while in 2015 they were less than 10%. Agricultural labourers decreased from 12% in 1958 to 1,7% in 2015. This trend is quite typical of Uttar Pradesh, where the proportion of agricultural labourers in the population is comparatively lower than in other regions. In the villages of Uttar Pradesh there is a prevalence of middle size landholding and marginal peasants rather than large landowners, and thus the demand for agricultural labourers is less. Moreover, in Palanpur there is a relatively small proportion of landless households, which also limit the offer of labour. With the mechanization of agriculture during the green revolution and the feminisation of self-cultivation tasks to compensate with the pluri-activity of the men, the share of agricultural labourers has further decreased. Middle farmers have not much decreased: from 30,7% to 26%. The class of middle farmers (including large tenants) has been decreasing much less in proportion than large farmers and agricultural labourers. The class of middle farmers is primarily populated by members of previously large farmers households who inherited

only a portion of the land property because of household partitioning (for more detail on land and population see Chapter 2). The land transactions have been relatively infrequent in Palanpur during the survey period so that changes in the land distribution attributable to land sales and purchases have a secondary influence in the class distribution (for more details on the land transactions in Palanpur see Lanjouw and Stern 1998:140-144).

The general trend we observe in the graph is a progressive transition from farm occupations to non-farm occupations. Before 1993 most of the people exiting agriculture were absorbed in the classes of low salariat and high salariat jobs; while after 1993 manual unskilled jobs and self-employment increased significantly. We can see that the class distribution in 1993 appears as a sort of discontinuity in the linear trend of change: there is a revival of agrarian occupations after a continuous fall down since 1958 and a contraction of the Low Salariat class from 19,2% in 1984 to 7,6 in 1993. In previous studies on Palanpur, the decline of low salariat jobs between 1984 and 1993 has been entirely accounted for by the closure of a local cloth mill, which. We know that, in 1984, 17 persons out of the total 57 involved in salariat employment outside Palanpur, were working in a cloth mill close to Moradabad. Semi-regular and seasonal salariat employment has expanded significantly in the period before 1993. A factory job was regarded as a desirable alternative to agriculture by most villagers, because it is relatively stable and secure, and earnings were higher than from unskilled self-employment. Moreover, factory jobs are relatively better than farming in terms of harshness. Therefore, the emergence of industrialisation near Palanpur (Moradabad is connected by train), incentivised small farmers to withdraw from agriculture or to lease out their lands for working in non-farm urban occupations. At that time, only a small number of factories in the vicinity accounted for the majority of the low salariat jobs, and the closure of one of them would have an important impact for the economy of Palanpur.

However, we should be cautious in analysing these data, because migration has increased in the same period, with quite a few people who had found regular employment in Delhi (for more details on spatial mobility see Chapter 3). The individuals who migrated for a long time are not included in the survey, and their occupations are not included in Figure 4.2; hence we cannot generalise on the decline in salariat jobs after the 1980s. Nevertheless, there is evidence at the national level of the expansion of manufacturing slowing down in the 1980s, after the first phase of increase from the Independence (1947), and before a durable stagnation started in the late 1990s and continuing up to today (for more details on the structural transformation in India see Chapter 3). The class middle farmers follows a different trend. After a progressive expansion from 1958 to 1975, it decreased slightly in 1984 but

then it reached the highest peack of the whole period in 1993, accounting for more than 42% of the total adult male population in 1993. After the closure of the cloth mills, people went back to farming as a primary activity, by leasing in some land or taking part in the family production.

We shall remind here that farming is an activity typically performed at the household level, and it is almost impossible to separate with certitude the specific amount of efforts produced by each member from the household as the unit of production. Having a salaried job in a factory does not prevent one from working partially in the family farm; in this case, farming would be a secondary occupation, but during periods of unemployment the very same occupation will be automatically accounted as primary occupation without implying necessarily more personal involvement than before. In fact, we observe that in 1984, 42,7% of the total secondary occupations reported were related to cultivation and livestock, while in 1993 the share of cultivation and livestock among the total secondary occupations went down to 20%, with the consequence of diminishing the total of individuals holding a secondary occupation from 131 observations in 1984 to 85 in 1993 (see Table 3.2 in Chapter 3). For this reason, the expansion of the class Middle Farmer in 1984 can partly result from a situation of under-employment after the closure of the cloth mill.⁷

Concerning high salariat, the proportion has always been marginal, with a slight increase in 1975, before decreasing in subsequent surveys and reaching a little 2% in 2015. The best jobs are located outside Palanpur, and as we have shown in Chapter 3, those who find a regular job tend to migrate permanently with their family. Hence, we should consider that the share of high salariat reported in Figure 4.2 is biased by attrition and thus, it does not intend to represent the real picture of the economy, but the structure of opportunities of the only residents in Palanpur.

An important change in the class structure concerns the dramatic rise of manual workers and self-employed. As we can see the class of manual workers, which includes people living on casual unskilled jobs, was almost inexistent before the 1980s but increased from 7,9% in 1993 to 23,4% in 2009 and finally in 2015 it became the largest class, accounting for 32,3% of the total working population in Palanpur. Similarly, self-employment has increased significantly after 1993 (from 6,5% in 1993 to 18,4% in 2015) and became the second non-farm class in terms of size.

This trend is symptomatic of a profound transformation of the economic structure of the last half-century in rural India, and it is of our interest in

⁷We could not verify this hypothesis by comparing variation of income per capita between the two periods, because income information are not available in 1993.

the present thesis to understand who drawn in this class, how the origins influence the probability to become a manual worker and which are the main determinants of social mobility for this class.

The analysis of the class distribution over the survey period helps to describe the structural changes in Palanpur since 1958 to 2015. These movements across the occupational structure do not necessarily imply an increase of the social fluidity in the society, which relates to the quality of opportunity irrespectively of the expansion and contraction of the classes. Indeed, if there were no structural changes and the size of the classes remained invariant, social mobility would mean that if one individual moves in the class distribution, another inevitably moves the opposite way. In contrast, a movement in the occupational structure due to the expansion of opportunities in a class might not signify an increase in the relative chances of mobility to that class rather than other, but it would simply mean that more opportunities have opened up into this class.

In the next chapter, we aim to understand if opportunities for individual mobility have opened up to all irrespective of their social background and net of the structural effects, which is the expansion or the contraction of farm and non-farm classes.

4.6 Conclusion

In this chapter, we defined the concept of social stratification and the class schema in Palanpur, that we apply in the analysis of the trends and patterns of social mobility in the next chapter. We classify different occupations in homogeneous categories, in terms of the market situation, work situation and employment relations. According to the theoretical framework of the social stratification defined by Goldthorpe, the life chances of an individual would be determined by these three aspects.

However, the idiosyncrasies of the case study, both in terms of the changing nature of the occupations across time and the specificities of the occupations, required to adapt the standard EGP schema to the local context. We combined the raw and detailed information collected across the surveys about the nature of the occupation, the sector of activity and the employment contract, with a detailed and rigorous analysis of the qualitative information collected in the interviews. From the vernacular categories emerging in the interviews we identified the most relevant terms of comparison to distinguish different groups of occupation, which are service contracts versus casual work, manual versus non-manual work, dirty versus clean job and regular versus irregular jobs.

We obtain a schema of seven classes: large farmers, middle farmers, agricultural labourers, high salariat, low salariat, self-employed and casual manual workers. In the second part of the chapter, we analysed the correspondence between the classes and the income deciles. The correspondence analysis shows a moderate level of association between income and class. Manual workers and high salariat are mostly associated with the top decile of the income distribution, agricultural labourers with the bottom decile. Low salariat and large farmers show an average level of income. Middle farmers and self-employed's income is below the average level, but they do not show any particular pattern of association, which means that there is a high volatility of income among these classes.

Finally, the class distribution since 1958 to 2015 show a general trend of transition from farm occupations to non-farm occupations, with a contraction of the class of large farmers and an extension of the class of manual workers from 1993 onward. Low salariat and high salariat remained marginal in terms of size over the whole surveyed period, except in the 1980s when a group of individuals from Palanpur were involved in low salariat jobs in factories located in the surrounding. In the 1990s, however, with the closure of a cloth mill in the vicinity of Palanpur, where many were previously working, the share of low salariat decreased again. Most of those who had salariat employment in 1980', migrated out from the village before 1993, hence the small size of the salariat classes might be biased by an effect of selection attrition. Agricultural labourers have always been less in number, and they ulteriorly decreased with the mechanisation of agriculture during the green revolution. The class of middle farmers remained stable over time except for 1984 when many farmers substituted cultivation with factory jobs as primary occupation and kept cultivation as a secondary occupation. Recently, middle farmers have shown a decreasing trend, but they still accounted for a quarter of the population in 2015. Half of the population was concentrated in the classes of manual workers and self-employed in 2015.

Chapter 5

Trends and patterns of social mobility

5.1 Introduction

In the context of socio-economic transformation and increasing integration of the village economy with the outside labour market, the trends and patterns of social mobility indicate whether new opportunities have been opened to all, irrespective of the social background. If not, it is of high relevance assessing whether the influence of social origins on the probability to access better opportunities is persisting or declining over time and whether the strength of association between social origins and destinations varies across classes. Indeed, social mobility is a marker of the reproduction of social inequality among different strata of the population.

We define social mobility as the intergenerational and intragenerational movements from a class to another within a given class schema. The transitions from father's classes (origins) to son's classes (destinations) tell us about the effect¹ of the social background on the life chances of individuals, while the transitions during the lifetime, from the previous class to the next, tell us about the career effect on the chances of an individual to access different classes relative to his entry job. Mobility can be vertical – downward and upward – or horizontal in case of transitions between classes which are ordered similarly.

In the previous chapter, we have seen that the classes of farmers have dramatically decreased in size over the years but, contrarily to what has been observed in western societies with the process of industrialization, manufac-

¹Whenever we use the term "effect" in the analysis of the social mobility we use it in a descriptive sense, without postulating causality.

turing has not become a suitable alternative for the surplus of population exiting agriculture in Palanpur. Instead of salariat, only the classes of manual workers and self-employed have considerably expanded in recent decades. These changes in the occupational structure, which are common to the rest of the country, raise issues on the reconfiguration of the social order. Is the whole population of farmers in villages as Palanpur destinated to become manual workers losing the status acquired from past generations? Or, apart from the land property, there are other sources of advantages transmitted over generations which could translate in better opportunities for some classes? At the opposite, we do not know if the transition out of the agrarian society steps up the wellbeing ladder with the creation of better conditions for those groups being historically landless to experience upward mobility.

In this chapter, we bring evidence of social mobility in Palanpur from 1958 to 2015 to answer on these issues and contribute to the discussion about the effects of modernization on the enduring patterns of social stratification as a characteristic of the social structure in rural India. First, we assess the total amount of mobility occurred in Palanpur from 1958 to 2015, enabling us to answer the following questions: how mobile have been the residents in Palanpur throughout the surveyed period? Second, we look at patterns of social mobility and social immobility within the class schema. A decreasing rate of immobility indicate that the direct inheritance of the parent's class is weakening, that is what we would expect to observe in Palanpur according to the modernization theory. Different rates of social immobility across classes indicate that the chances of inheriting occupation are higher for some classes of origins than for others, perhaps due to the transmission of the land property or *jati* membership associated with specific occupations.

Conversely, the increase of mobility does not necessarily mean that there is no more transmission of social advantages or disadvantages from previous generations. Upward mobility is presumably highly influenced by the social origins, through mechanisms of intergenerational transfer of wealth and status. If this hypothesis were verified, it would mean that the best opportunities are hoarded by the strata of the population with the best capital endowment, thus reproducing social inequality. By extension, noticeable changes in downward mobility rates would sharpen or dull the awareness of social exclusion in the local social structure. In a society where the *jati* membership is historically intrinsic to the labour division, those workers involved in jobs considered dirty or physically demanding (ganda kam and mehnat kam, see Chapter 4) are automatically placed at the bottom of the social hierarchy by the rest of the society.

The contentious question of equality of opportunity, which is the core motivation for studying social mobility, require the sociologists to distinguish absolute mobility from relative mobility. The former, which measures the proportion of individuals whose class is different from their parents' class, is relevant to the question of class formation, changes in the class size and improvements in the opportunities available (Goldthorpe 1980: 121). The latter, which measure the relative chances of individuals with a different social background to be in the same class keeping constant the occupational structure, is an indicator of the fluidity or openness in the society. The two components are not interchangeable, and there is no such thing as the best measure of mobility among them. How to deal with these two components depends on the particular dimension of mobility that one is trying to capture.

To this regard, Breen and Whelan say "(...) social mobility is a complex phenomenon, and we should avoid one "true" number approaches. If the focus is on class formation and elite closure, then what is crucial is the de facto patterns of mobility as reflected in the current composition of each class. In this case, we should focus on absolute mobility. If, on the other hand, the concern is with equality of opportunity, then mobility must be assessed in relative terms" (1996:33). Using standard methods of social mobility studies, largely applied in the sociological literature and presented in the section below on data and methods, we measure both absolute and relative mobility trends over time and bring out some important considerations on patterns of association between class of origins and class of destinations and their effects on the relative chances of social mobility across three generations of individuals.

5.2 Research questions and hypotheses

In Palanpur, we are interested both at the gross change in the social mobility over time, which relates to the availability of opportunities for the society, and the equality of chances to access the same opportunities for individuals having different social backgrounds (i.e. the class of origins). The equality of opportunity, measured by the relative mobility, is of substantial interest for our thesis because it accounts for the degree of openness, or social fluidity, of the society, net of the structural effects.

The first question we intend to answer in this chapter concerns the changes in the amount of total mobility and immobility: how much mobility adult males in Palanpur have experienced over the whole period surveyed? Did the rate of immobility decrease over time? Absolute mobility rates, which are measured by the number of transitions from a class to another at two different points of time or from a generation to the next, will help us to compare mobility trends at different periods and to distinguish patterns of mobility

- vertical, horizontal and downward - from immobility. As seen in the discussion on the structural transformations of the economy and the changes in the occupational structure in Palanpur, agriculture (including farmers and labourers) was the major sector of activity in 1958, involving more than 90% of the total adult male population, before sharply declining to only 35% of the adult male population in 2015. Agriculture has become a secondary occupation for most people. In contrast, the main sectors of substitution of primary occupations are construction and services, where casual forms of jobs and self-employment are more common than salariat jobs for Palanpur's inhabitants who commute to outside places for work.

In this context, we would expect these changes in the occupational distribution to be reflected in a relatively high rate of intergenerational mobility, in particular from agrarian classes to classes based on non-farm occupation, and thus the rate of immobility to decrease. However, we would also expect the patterns of mobility from agrarian classes to non-farm classes to remain influenced by social origins through mechanisms of intergenerational transmission of socio-economic advantages and disadvantages. Individuals having origins in top classes (e.g. large farmers) are expected to substitute agriculture with occupations providing them with an equivalent social position. In that case, mobility is defined as horizontal rather than vertical: there has been a movement between classes, but the social position has remained the same in terms of status. If social origins continued to matter in the society, and the modernization theory was not verified int his context, horizontal mobility would prevail over vertical mobility. This hypothesis is supported by previous research on Indian's men's intergenerational stability (Vaid 2018).

Secondly, we are interested in the relative mobility chances keeping structural changes, for instance, expansion and contraction of certain classes due to the transformation of the economy, constant. The second question of research will be: has there been any change in the relative mobility (or social fluidity) across time? Given the predominance of patriarchal father-to-son occupational inheritance in the agrarian society, we would expect the association between origins and destinations to be stronger in the early period and to become weaker with the expansion of new sectors of occupations which were not available before. The reasons for the increase of relative mobility chances are assumed to be related to both push and pull factors linked partly to the process of modernization and partly to demographic reasons.

The demographic pressure on land per capita (see Chapter 2) is considered to be a push factor responsible for the diversification of the economic activity within the household, and thus even sons of large landlords are expected, at some point in time, to have higher probabilities of relative mobility in the last decades. Indeed, we expect the reduction of the land size induc-

ing downward mobility from large farmers to middle farmers, even for those individuals who inherit the occupation of their fathers. Until the Green Revolution in the late 1960s and early 1970s the inheritance of farming occupation is expected to remain high, while from the 1980s onward, with the increasing integration of Palanpur with outside non-farm labour markets, we expect the direct inheritance to decrease even among sons of farmers. The exposure to new markets enlarges the set of opportunities and the preference for occupations others than the fathers' one is expected to spread among the last generations. We know from previous studies and the narratives collected in Palanpur that increasing links with the outside world, through experiences of migration and commuting, has enlarged the social networks of individuals: new ties, especially weak in nature (Granovetter 1973), are expected to facilitate the access to new opportunities, directly through the offers of job and training, or indirectly by sharing resources and information. The diffusion of telecommunication technologies, like portable mobiles, has also undoubtedly played a role in the intensification of the interactions with outside labour markets. For all these reasons, we would expect social fluidity increasing with modernization and in particular after the Green Revolution.

Thirdly, different patterns in relative mobility are discussed. The strength of association between origins and destinations is expected to vary with social origins; in other words, the chances of relative mobility are expected to vary for sons of different classes. Do the chances of upward mobility increase equally for individuals having different social origins? Do different social origins affect the risk of experiencing downward mobility? We would expect individuals with low-classes' origins having fewer chances of upward mobility because of cumulative socioeconomic disadvantages, for instance, no land property and a lower level of education. Similarly, immobility rates are expected to follow different patterns of change according to some factors indirectly associated with the class of origin. In essence: land property inheritance, economies of scale within the household, and internal norms of labour organization within different jati groups are some of the factors influencing the probability of inheriting the father's occupation.

5.3 Data and methods

We define social mobility as the transition of an individual from a class of origin to a class of destination, within the 7-class schema defined in the previous chapter: large farmers, high salariat, middle farmers, low salariat, self-employed, agricultural laborers and manual workers. In most of the analyses we develop in this chapter, we keep the seven classes disaggregated.

However, measuring patterns of vertical mobility, ascendant and descendants, involves necessarily to examine movements in a given hierarchical dimension of the social space.

Therefore, to rank some classes above others in the class schema is essential. Although the schema we use for Palanpur is not strictly hierarchical, contrarily to the schemas based on scores of status attainment, it is still possible to group and rank classes with equal life chances and similar resources on a scale of social positions. The qualitative information collected during the fieldwork² allows us to identify systematic terms of comparison between different categories of occupations relevant in the local context.

In the interviews, we asked a set of questions about reputation, social stigma, and personal preferences associated with different occupations performed by the villagers. From the analysis of the interviews, it emerges very clearly that regularity of job is more desirable than irregularity. A formal contract ensuring basic social protections is valued better than an informal agreement. Moreover, manual work is considered lower in terms of prestige than non-manual work. The tasks performed in the outside, involving sun exposure, dust or dirtiness are associated with a low status, and inversely, clean workplaces and safe working conditions are considered a marker of personal success. Skilled cognitive jobs are more prestigious than unskilled jobs. Only in the case of farming activities, the size of the property determines the degree of prestige and social status of the family. Finally, the economic outcome associated with different classes is also perceived as a factor of social distancing, but the work situation and the employment situation prevail over the market situation in the hierarchical classification of groups of occupations.

For instance, the case of a young man performing a white-collar profession in the corporate sector, whose father was an agricultural labourer, is depicted in the narratives of the inhabitants as an exemplary story success and upward mobility. Conversely, the case of a large landowner who sold his land, for some reasons, and ends up working in low salariat jobs, is considered an example of failure and downward mobility. The worst position ever, in the subjective perception of the respondent's, is associated with casual manual works, which are irregular and informal. Although in most cases, economic reward from casual manual work is higher than for middle farmers or small business activities, the social position identified with these jobs stands at the bottom of the prestige hierarchy. Based on these considerations, we define a collapsed version of the 7-class schema with three categories: top class,

²For more details on fieldwork see the section on the methodology in Chapter 1 and section A.1 in the Appendix with guidelines of the interviews.

I	Top Class	Large farmers High salariat
II	Middle Class	Middle farmers Low salariat Self-employed
III	Low Class	Agricultural labourers Manual workers

Table 5.1: Collapsed version of the class schema

middle class and low class (Table 5.1). The top class includes large farmers and high salariat; the middle class includes middle farmers, low salariat and self-employed; and the low class includes agricultural labourers and manual workers.

According to the hierarchical dimension of this schema, the movements between low salariat, middle farmers and self-employed are considered horizontal mobility, while the movements from high salariat and low salariat are downward mobility and vice versa, the movements from low to high salariat are upward mobility. Since, the period observed is characterised by dramatic structural transformations of the economy, with the transition from agriculture to other sectors of activities, this schema also has the advantage of considering non-farm and farm occupations at the same level in terms of social position. Any tentative of establishing a rank between agrarian classes and classes based on non-farm occupations would be anachronistic in this context.

We restrict the analysis to the working population of males aged 15 years minimum and being resident in Palanpur. As we discussed in the second chapter of the dissertation, women's participation in the workforce has not been covered except for the women-round in 2008-2010 on a sample of women, no extended and replicated data collection has occurred in Palanpur. Moreover, intergenerational mobility could not have been possible in Palanpur, even if consistent data were available, because, all the women leave the village after marriage and move to her in-laws' village, a part from few exceptions to the customary patrilocal patterns; thus, only information concerning immigrant women could have been collected in the village.

For the analysis of the intergenerational mobility, we select the class of the respondents at the first observation over the whole surveyed period. The first observed class does not correspond with certitude with the very first occupation of the individual because the period between each survey is quite long (approximately 10 years), and we do not have information for all the years in between. However, it is reasonable enough to use the first occupation surveyed to proxy the individual's class at the early stage of his professional life-course. Standard analyses of intergenerational mobility generally use classes of individuals once they have reached "occupational maturity" (35 years old and above) to avoid under-estimation of the origin-destination association due to life cycle effects (e.g. the entry job to the labour market is assumed to be temporary and less qualified or skilled than later jobs). Still, it may be of some interest to focus on other specific life cycle phases, as in Erikson and Goldthorpe (1992) who also considered mobility from the class of origin to the class of first employment in their analysis of intergenerational mobility. In the context of rural India, mortality is higher, duration of life is shorter, education is less and attendance to secondary school is rare. Hence, participation in the workforce starts earlier compared to advanced western economies and occupational maturity should be considered at an earlier age than in the standard literature of social mobility.

Moreover, in the studied context, occupation matters a lot for marriages: a good occupation of the potential groom incentives families to marry their daughters and to offer a higher bribe. For this reason, we consider that the occupation held at the age of marriage is a good indicator of the social position achievable by an individual. According to the Census of India, in 2011, the median age at marriage for men in rural India was 22. In Palanpur, we do not have precise information to calculate the mean age at marriage. Still, we observed that the proportion of unmarried men remains almost stable at 20% in the age cohort of 25 and later cohorts. Hence, we should consider the occupation of an individual aged 25 as a fair indicator of mobility compared to his father's position.

The selection procedure we followed took into account two crucial criteria: the numerosity of observations (i.e. pairs matched) and the strength of association between origins and destinations at different phases of the life cycle. We compared the life course effects corresponding to the first selection (i.e. first observed class) versus the second selection (i.e. second observed class). The mean age in the first selection is 26 years old, with a standard deviation of 10 (the coefficient of variation is minor than 0.5, which is considered to be low variance), while the mean age in the second selection is 36 with a standard deviation of 11. Considering the standard deviation, the age cohorts corresponding to the first selection is 15-35 and 25-45 for the second; the fathers' class and the son's class fall in the same age cohorts. With the second selection, we lose 199 observations compared to the first selection: there is a 30% difference in the numerosity of the pairs' sons-fathers matched. The

main reasons for this difference are migration, whose probability increases in the age group 25-45, and mortality, which rises in the second selection because the share of the population aged more than 45 is higher than in the first selection.

The association between origins and destinations is confirmed with both selections (first observed and second observed class), by a Fisher's exact test (p=0.000), but the strength of association, measured by a Cramer's V estimate, decreases with the second selection (V1=0.3 and V2=0.2). The class inheritance (i.e. social immobility) is lower using the second selection of the age cohort 25-45 compared to the first (30.4% versus 58.4%). Due to the small size of the observed population, we favour the criterion of numerosity, and we keep the first selection for the analysis of intergenerational mobility. The mobility measured using this selection should be considered as a partial indication of social mobility at a specific stage of the professional career. For a "completed" pattern of mobility, we also look at the intragenerational mobility from the first occupation to the second observed occupation. Finally, we study the probabilities to access each destination controlling for period and life cycle effects, in logistic models.

We capture the period effects by sampling the population observed in three birth cohorts: the first cohort of individuals born before 1955, the second cohort of individuals born between 1955 and 1975, and the third cohort of individuals born after 1975. The cohorts have been defined in order to keep a balanced sample in each cohort (number of observations) and to compare different periods relevant for the analysis. The first cohort covers the period of the Green Revolution (spreading from the late 1960s to the late 1970s): we compare the class of individuals during the Green Revolution with their fathers 'class at the time of the Land Reforms in the 1950s. The second cohort corresponds to the end of the Green Revolution and the industrialization: we compare the class of individuals during the industrialization with their fathers' class at the time of the Green Revolution. Finally, the third cohort covers the most recent evolution influenced by the neo-liberal reforms of the 1990s and the transition toward a market economy: the class of individuals living during the neo-liberal era is compared to their fathers' class at the time of the industrialization.

In total, over the whole surveyed period, we have 1755 observations (i.e. individual-year) of working males aged minimum 15 whose class is not missing (there are only 7 cases of class missing which we consider negligible and we exclude from the analytical sample) (Table 5.2). In the second row of this table, we can see that we matched 75.7% of the total individuals observed with their fathers. In 44% of the cases, we matched the individuals with both fathers and grandfathers. Considering the small size of the individuals

1958 1963 1975 1984 1993 2009 2015 Total N id 166 159 194 260 290 333 353 1755 N id-father matched 50 121 198 249 341 1329 60 316 30.1 37.7 62.476.285.9 94.996.6 75.7300 N id-father class matched 46 55 116 191 239 327 1274 92.091.7 95.996.596.0 94.995.9 95.9 N id first classfather first class matched 46 13 69 92 92 163 77 552

Table 5.2: Distribution of the analytical sample by year

Table 5.3: Mean age of individuals with missing fathers

	1958	1963	1975	1984	1993	2009	2015	Total
Mean age (id)	40	42	48	48	56	48	53	46
N Fathers missing	116	99	73	62	41	21	14	426

matched with both fathers and grandfathers over the whole period, we do not decompose the analysis in three generations, but we only consider the pairs fathers-sons. The rate of missing matches with fathers in early survey years is high (69.9% in 1958), but it slows down in later survey years (3.4% in 2015). The missing corresponds mainly to the individuals whose fathers could not have been surveyed because they were dead already. Indeed, the mean age of the individuals with missing fathers is above 40 in 1958 and progressively higher in later survey years (Table 5.3) because of higher life expectancy. In other cases, we could not link of individuals who appeared for the first time in the dataset to any previous households.

Part of them corresponds to the husbands of the few women who did not move to their in-law's village after their marriage or returned in Palanpur after a short stay in their in-laws' village. These exceptions occur mainly when a young woman has no brothers, and her parents are concerned with the transmission of land ownership and the care needed in their old age. A few other cases are related to immigrant families coming from different villages: in-migration is extremely rare in Palanpur and always motivated by familial ties on the women side. Finally, some cases are related to isolated individuals who came back to Palanpur after a period of migration, and we could not link to any previous household because of information's discrepancies between surveys or absence of relatives in the village.

In 95.9% of the cases of individuals matched with their father, we have the information on class for both sons and fathers, which corresponds to a total of 1274 observations (see the fourth row of Table 5.2). Finally, using the first selection for the analysis of inter-generational mobility (first observed class over the whole survey period), we obtain a total of 552 pairs of fathers-sons matched. In the last row of the table we can see that, for instance, in 2015 there are 77 additional cases of individuals whose class has been observed for the first time during that survey and thus, they are matched to their father's first class for the first time and added to the pairs we will analyse in the mobility tables.

Part of the contribution of this thesis is the extension of the empirical basis for the analysis of the familial arborescence. We incremented the inter-generational links between fathers and sons of 50% with 307 additional matched pairs to those already established using data from previous surveys. Part of the additional matched pairs have been identified through further analysis of the household links throughout the annual dataset (we created a "dynasty" identifier in the panel to track all the households partitioned from the initial one across the surveys), and another substantial part has been established through primary data collection on the full genealogy over three generations. The genealogical survey has been carried by the author from March to June 2018 on a sample of approximative 130 households.³

³Himanshu, Lanjouw and Stern (2018) matched 245 sons with their fathers, in 2009 and 1983, and they reported the transition from the father's occupation to the son's occupation in two separate transition matrices: the first with the father's occupation in 1957 and the sons' occupation in 1984 and the second with the father's occupation in 1984 and sons's occupation in 2008. They classified the occupations in the following broad categories: not working, student, cultivation, agricultural labour, casual labour (non-farm), regular employment, and self-employment.

5.3.1 Analytical design

The exercise of measuring social mobility in a society undergoing profound structural transformations requires specific precautions to distinguish the amount of mobility attributable to the changes in the occupational structure from the social fluidity due to changes in the individuals. We could think of measuring social mobility by merely comparing the proportions of sons falling in the same class of their fathers with those moving to other classes. This way, we would only measure the total mobility rate, which is heavily dependent on the transformation of the occupational structure (i.e. the changing size of each class). If we take the example of a self-employed, whose father was a farmer at a comparable stage of the life cycle, we should be able to distinguish the chances this individual had to be self-employed rather than not to be self-employed, from his chances relative to the chances of the others to be in that class rather than being in each of the other classes. This exercise lies essentially on the definition of mobility tables, which are the standard tool for the analysis of social mobility (Hauser 1978, Hout 1983, Ballarino and Cobalti 2003). A mobility table is usually a square matrix with the same class schema for origins and destinations. The associations between origins and destinations are reported in tables of two kinds: outflow and inflow. Hout describes the difference between the two in the following terms: "the outflow percentages record the distribution of destinations for each category of origin; the image is of labour flowing out if the given origin occupation. The inflow percentages record the distribution of origin for each destination; the image is of labour flowing into the given destination occupation" (Hout 1983:11).

In the first part of the analysis, we show and discuss inflow and outflow mobility tables for each birth cohort, and we calculate synthetic measures of mobility patterns to compare the trends at different points of time. Then, in the second part, we calculate from the mobility tables the "odds-ratio", which are thought to be invariant to proportional changes in the total distributions (i.e. margins of the table), and thus they are used in the literature on social mobility as good indicators of relative mobility. We compare measures of intergenerational mobility with measures of intragenerational mobility to provide an analysis of the complete pattern of mobility. In fact, since most mobility between social classes may occur subsequent to the first occupation, purely intergenerational comparison tends to underestimate the total experience of social mobility in the population as a whole. We compare relative mobility rates over time, and, in the third part of the analysis, we test with log-linear models the relevant patterns of association between origins, destinations and cohorts and we estimate their plausibility in the prediction of

social mobility trends in Palanpur. Finally, we estimate with seven binary logistic regressions the marginal effects of social origins on the probabilities to be in each class of destination, controlling for castes, education and other individual characteristics, which are expected to be significantly associated with the probability to be in different classes.

5.4 Absolute mobility

The absolute, or total, mobility rates are an indicator of the total amount of mobility in the society. Using the data in Table 5.4, we can compute basic measures of absolute mobility by cohort: immobility rate and total mobility rate. The father's class in columns is referred to as origin, whereas the son's class in rows is referred to as a destination. The total mobility rate is the proportion of individuals whose class (destination) is different than the one of their fathers (origin); in other words, the total observations in the off-diagonal cells in the mobility tables. Conversely, the total immobility corresponds to the observations in the cells on the diagonal, or the individuals whose class is exactly the same of the class of their fathers. We observe that in the first cohort, 46 out of 102 individuals are in the same class as their fathers, almost all in large farmers. In other words, half of the population is immobile, and the other half is mobile.

Mobility can be of different kinds: upward, downward or horizontal. To distinguish the measures of vertical mobility from horizontal mobility, we use the collapsed version of the class schema, where classes corresponding to the same social position have been grouped. By using the 3-class schema, all the cells above the diagonal are filled with those individuals who have been downwardly mobile. Conversely, those individuals reported in cells below the diagonal have been upwardly mobile. Finally, the movements between classes which are similarly ordered in terms of market situation, work situation and employment relations are considered as horizontal mobility, which is the case, for instance, for the 24 individuals in the third cohort whose origins is middle farmers and destinations are either low salariat or self-employed. In essence, their movements from origins to destinations correspond mainly to transition from an agrarian class to a non-agrarian class, without any gain or loss of social position, they remain in a middle-class position. Table 5.5 and Figure 5.1 summarize all the absolute mobility rates, where upward and downward mobility have been calculated from the 3-class schema, while the other rates have been derived from Table 5.4.

The total mobility rate has increased from 28.4% in the first cohort to 79.7% in the third cohort. However, the steepest increase has happened be-

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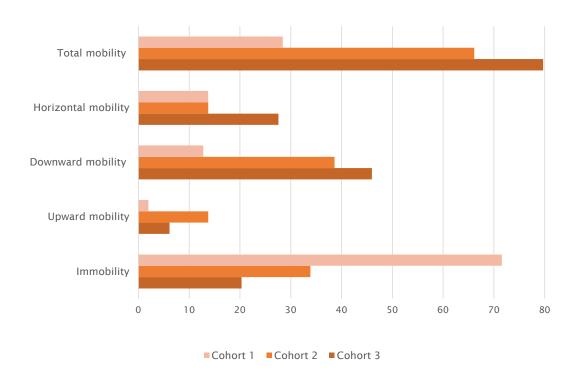
Table 5.4: Intergenerational mobility table: outflow rates (row percentages) by cohort.

Cohort 1	Destination							
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	45	4	7	1	3	1		61
High salariat								•
Middle farmers	0	1	20	9	1	0		31
Low salariat	0	0	0	2	0	1		3
Self-employed	0	1	0	0	1	0		2
Agricultural labourers	0	0	0	0	0	5		5
Manual workers			•					
Total	45	6	27	12	5	7		102
Cohort 2	Destination							
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	33	4	28	13	4	6	7	95
High salariat	1	0	0	0	1	0	0	2
Middle farmers	4	0	20	13	2	3	7	49
Low salariat	0	1	1	2	0	1	2	7
Self-employed	0	0	1	1	3	0	2	7
Agricultural labourers	2	0	9	7	4	6	1	29
Manual workers	•	•	•				•	
Total	40	5	59	36	14	16	19	189
Cohort 3			Destin	nation	1			
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	12	4	28	6	7	0	22	79
High salariat	3	3	3	0	4	0	1	14
Middle farmers	7	0	20	4	20	11	28	90
Low salariat	2	1	8	9	10	2	12	44
Self-employed	0	0	2	3	6	0	4	15
Agricultural labourers	0	0	3	0	3	0	8	14
Manual workers	0	0	0	0	1	1	3	5
Total	24	8	64	22	51	14	78	261

Table 5.5: Absolute intergenerational mobility rates by cohort.

	Cohort 1	Cohort 2	Cohort 3
Immobility	71.6	33.9	20.3
Upward mobility	2.0	13.8	6.1
Downward mobility	12.7	38.6	46.0
Horizontal mobility	13.7	13.8	27.6
Total mobility	28.4	66.1	79.7
Notes.			

Figure 5.1: Absolute intergenerational mobility rates by cohort (%)



tween the first and the second cohort. Within the mobiles, those who have experienced upward mobility, going from the low class to the middle, or the top class, and from the middle to the top class, are only 2\% in the first cohort, 13% in the second cohort and 6% in the third cohort. The rate of upward mobility increased between the first to the second cohort because of some middle farmers who succeed to become large farmers during the Green Revolution and a vast majority of agricultural labourers' sons who moved to higher classes. The upward mobility between agrarian classes are related to the Zamindari abolition (i.e. the land reforms) and, to some extent, the rapid economic growth that western Uttar Pradesh has experienced since the beginning of the Green Revolution. The third cohort, compared to the second, has not recorded a high rate of upward mobility but, at the contrary, downward mobility has considerably increased with many downward movements from large farmers to middle farmers and from any class of origins into manual workers. Horizontal mobility has also increased in the third cohort, most of the movements took place within the middle class, and in particular toward self-employment, the second predominant form of work, after manual casual work, emerging in recent decades.

As already mentioned in the introduction, we must keep in mind that the increase of absolute mobility does not necessarily imply a real weakening of the association between origins and destinations. The structural transformations in the occupational distribution may change the relative proportions of different occupational classes, which in turn could affect the absolute social mobility (Reddy 2015). Indeed, we can see that the margins of the mobility tables change considerably, reflecting the changes occurring in the occupational structure of Palanpur from 1958 to 2015 (see Figure 4.2 in Chapter 4). Large farmers are diminishing in absolute number, and manual workers dramatically increased in recent decades. The absolute mobility rates show a prevalence of downward and horizontal mobility over upward mobility for the three cohorts. In comparison with the existing literature in developed countries, where the top class is expanding and upward mobility is increasing with industrialization, the absolute mobility rates observed in Palanpur lead to some counterintuitive results. With the transition from an agrarian society to a market economy, the top class in Palanpur is shrinking in size and the low class, mostly constituted of manual workers is dramatically increasing. New opportunities opened up to all, but not of upward mobility. As discussed in Chapter 3, commuting to surrounding areas where to perform manual casual labour has become a predominant pattern among the residents in Palanpur. From Table 5.4 we can compute inflow and outflow percentages and analyse respectively, where people in different classes of destination comes from and where people of different origins are going to.

5.4.1 Inflow mobility

Inflow rates, reported in the column percentages in Table 5.6, tell whether a class of destination is self-recruiting (same origin and destination), or it absorbs people having different origins.

In other words, the table of inflow mobility reports the origins' distribution of the destinations. We can see that large farmers were all self-recruiting in the first cohort: 100% of the large farmers had origins in the very same class. Large farmers continued to be mostly self-recruiting over time, but the rate of self-recruitment has decreased over time and especially in the third cohort where only half of them were self-recruiting. The other half was mainly composed of people who moved upwardly from middle farmers and salariat. For instance, Sheesh Pal, whose father inherited in the 1990s an additional parcel of land after the death of his uncle (in the absence of sons the inheritance can go to the brothers), so that the property jointly owned by the household has increased, having an upward effect on Sheesh Pal's position. A similar story happened with Rahul, who moved upwardly from middle farmers' origin to large farmers: his father's brother bought some land on his name when the family was still joint, but after the death of the father (Rahul's grandfather), his brother decided to split from the joint household, he took his share of the land but refused to share his acquisition with his brother. Rahul's father pretended to have some rights on the parcel of land bought by his brother. After years of legal fighting, Rahul's father won the cause and, as a consequence, Rahul's became a large farmer. Another example is the one of Suresh, who took back the amount of land leased out by his father when he was working as an employee for the railways:

Suresh (40, Moria): After I came from Punjab for the harvesting, I asked to some friends for some opportunities in factories, but I could not find any permanent job in Moradabad, and trains are not reliable, so I should have moved there letting my brother alone again to look after the farming. (...) He was angry with me because farming is tough and doing it alone is difficult, so I decided to take back the land leased out and to dedicate myself to cultivation

In the second cohort, there were also two cases of large farmers coming from middle farmers because of the operation of land redistribution happened in 1976 when six households in Palanpur were allotted one acre of land each by the government. Contrarily to what the target of the operation was supposed to be, two of the beneficiaries were not landless. They had a landowning father with whom they lived at that time (Lanjouw and Stern

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Table 5.6: Inflow percentages by cohorts.

Cohort 1	Destination							
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	100.0	66.7	25.9	8.3	60.0	14.3		59.8
High salariat		•	•	•	•	•		
Middle farmers	0.0	16.7	74.1	75.0	20.0	0.0		30.4
Low salariat	0.0	0.0	0.0	16.7	0.0	14.3		2.9
Self-employed	0.0	16.7	0.0	0.0	20.0	0.0		2.0
Agricultural labourers	0.0	0.0	0.0	0.0	0.0	71.4		4.9
Manual workers		•	•	•	•	•		
Total	100	100	100	100	100	100	100	100
Cohort 2	Destination							
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	82.5	80.0	47.5	36.1	28.6	37.5	36.8	50.3
High salariat	2.5	0.0	0.0	0.0	7.1	0.0	0.0	1.1
Middle farmers	10.0	0.0	33.9	36.1	14.3	18.8	36.8	25.9
Low salariat	0.0	20.0	1.7	5.6	0.0	6.3	10.5	3.7
Self-employed	0.0	0.0	1.7	2.8	21.4	0.0	10.5	3.7
Agricultural labourers	5.0	0.0	15.3	19.4	28.6	37.5	5.3	15.3
Manual workers			•	•	•	•		
Total	100	100	100	100	100	100	100	100
Cohort 3			Destin	ation				
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	50.0	50.0	43.8	27.3	13.7	0.0	28.2	30.3
High salariat	12.5	37.5	4.7	0.0	7.8	0.0	1.3	5.4
Middle farmers	29.2	0.0	31.3	18.2	39.2	78.6	35.9	34.5
Low salariat	8.3	12.5	12.5	40.9	19.6	14.3	15.4	16.9
Self-employed	0.0	0.0	3.1	13.6	11.8	0.0	5.1	5.8
Agricultural labourers	0.0	0.0	4.7	0.0	5.9	0.0	10.3	5.4
Manual workers	0.0	0.0	0.0	0.0	2.0	7.1	3.9	1.9
Total	100	100	100	100	100	100	100	100

Notes. High salariat and manual workers are accounted as structural zeros in the first and second cohorts when filled with a dot.

1998:191), and thus they became large farmers subsequently. The other beneficiaries were sons of agricultural labourers, who became middle farmers after the redistribution.

These examples of upward mobility among agrarian classes show that origins do matter a lot because the upgrade of these individuals' social position within the class schema is somehow related to the properties inherited by their fathers. Besides, these few cases (7 in total) of large farmers whose fathers were middle farmers, the distribution of the middle farmers shows a different story concerning inflow rates. In the first cohort, 74% of them were self-recruiting; however, in the second and the third cohort, most of the middle farmers have origins in large farmers. This result reinforces the argument of inheritance and household partitioning diminishing the estate transmitted from one generation to the next and thus provoking a social downgrade of those families who had large landholding previously. Despite the fact the intergenerational transition from large farmers to middle farmers comes along a reduction of the land owned per household, this does not necessarily imply a degradation of per capita income. Nevertheless, the decline of the land size owned by the family has not only economic consequences for its members, but it also represents a loss in terms of social status. Hence, we consider this pattern as downward mobility (we also found further evidence of this point in the outflow mobility of large farmers discussed below). Similarly, the agricultural labourers, who belong to poor and landless families in the agrarian society (71.4\% of self-recruitment in the first cohort), recruit also from middle farmers in the second and third cohorts (18.8% and 78.6%). Overall, the inflow rates suggest that downward mobility has been prevalent for agrarian classes.

High salariat, which only concerns a minority of the population, recruits mainly from the top class. Still, there is also a small share of people coming from low salariat in the third cohort. Out of the three self-recruiting high salariat people in the third cohort, we know from the interviews that the fathers of two of them, who worked for the railways, took voluntary retirement to give their jobs to their sons. In the second cohort, low salariat also recruited from larger and middle farmers. As many as seventeen adult males were employed in 1984 in the local cloth mills where We interviewed Bedram, who worked for eight years during his early days, as an employee in a cloth mill located in a village close to Palanpur, before it shut down:

Bedram (70, Moria): I never knew that the mill will be closed soon after, if I had known that I would have joined some government job instead. At that time, it was very different! Today everyone fights to get a government job because unemployment is so high, but at that time

people were actually called and encouraged to join mazdoori (manual) work under government. Station masters used to tell me 'Bedram, you go for the duty early in the morning and come late, come work here in the station, we will get you a job' They offered me a position as gatekeeper but I was not interested in that job because they offered Rs 380 a month and I used to earn Rs 9-10 a day so I continued to work in the mill. But the factory was closed later and then vacancies were closed so I did not get another opportunity

The spread of opportunities in local cloth mills in the 1980s made many sons of large farmers and middle farmers move into low salariat in the second cohort. After the closure of the local mills, low salariat has become mostly self-recruiting. According to the narratives collected in 2018, in a few cases, the employment is transmitted directly from father to son, for instance, introducing the son in the same factory. In other cases, the occupations are different and not necessarily related. For example, the father of Surjeet (27, Jatav) was working as an employee in a shop of wheat grinding and oil extraction from mustard seeds, while he works as an employee in a grocery shop.

Although we would expect self-employed being more likely to inherit their business from fathers and especially artisans, this is the case only for a small share of them in the first and the second cohort. Those who inherited the status of self-employed from fathers in the first two cohorts were very likely to be involved in residual forms of traditional occupations. In contrast, the selfemployed coming from agrarian classes are linked to new businesses, mainly petty trade in Palanpur (we saw in Chapter 2 that the number of shops in Palanpur increased over the survey period) and services in nearby towns. The self-employment in Palanpur, as discussed in the previous chapter, has considerably changed over time in terms of occupations and social positions. Thus, the class includes a range of very different situations. At the time of the agrarian society, self-employment mainly consisted of patron-client relationships pertaining to the *jajmani* system. For instance, watercarriers, potters, sweepers, carpenters, oilpressers, barbers, washermen, etc., from landless castes, provided their services to the landlords in exchange of a fixed amount of grain for the whole year services. In addition to these services, many were also involved in agricultural labourers. Later on, these kinds of castes obligations toward the cultivators have dissolved in Palanpur. Some occupations have disappeared with the spread of new goods in nearby markets, and others are still active in Palanpur. For instance, barbers, oilpressers or tailors who provide private transactions with monetary compensations. Besides these cases, in the second and the third cohorts of self-employed, we find more petty shops owners and skilled artisans like masons or carpenters, but also some businesses which require capital investments like marble polishing, motorbike repairing services, and other small enterprises. However, over the whole surveyed period, no large businessmen have been recorded in Palanpur. Therefore, despite the diversity of occupations performed by the self-employed in Palanpur, their social positions can be accounted for in a homogeneous class.

Finally, manual workers formed a new class emerging from the 1980s onward; for this reason, no one, except five cases in the third cohort, has origins in this class. The class of manual workers is the most heterogeneous in terms of origins' composition. In essence, it recruits from all the classes and, in recent years, it has become one of the most populated destination class.

Overall, we found greater inflow mobility into the expanding classes, manual workers and self-employed, and less into the agrarian contracting classes, except for the higher rate of inflow into middles farmers in the third cohort. We found evidence in the interviews, of inflows to middle farmers corresponding in many cases to situations of unemployment or partial employment hidden behind the status of marginal farmers. Among the interviewees, many answered proudly "I'm a kisan (farmer)" to the question "What is your job?". But the detailed questions asked later in the interviews revealed the fact that very frequently farming is only a complementary occupation involving fewer working-days than the non-farm jobs performed in addition to farming as subsidiary sources of income. This finding reinforces the argument discussed by Dreze and Mukherjee (1989) of low-income replacement activities being typically not counted as "employment" in many cases. The case of middle farmers whose fathers were low salariat (12% in the third cohort) does not necessarily imply that their fathers were not themselves the owners of the parcels of land. At the contrary, it is more plausible that their land estate was larger before splitting the property among sons, but, since they were involved in regular forms of employment, farming was not their primary occupation. A further argument consists in the replacement attractivity of non-farm jobs available on the market. Low salariat jobs in local cloth mills could be attractive enough, in terms of wealth and status, for pushing farmers to lease out their land or to hire extra labour force, to give priority to regular employment instead of cultivation. But, in the absence of attractive employment opportunities, those who own a little land might prefer agriculture as a backup, rather than unskilled manual jobs:

Mahipal Singh (28, Other): People only rely on agriculture because there are no other options available. It is not their best choice. There

are no profitable returns from agriculture. They cultivate 3 crops in a year that is sugarcane, paddy and wheat. Sugarcane is a perennial crop which is harvested after a year. The current rate of sugarcane is rupees 345 per quintal. The yield is around 30 quintals from a bigha of land. The rate is nothing in comparison to the cost incurred in its cultivation. Mentha is such a crop which gets ruined when it rains. Rain makes the soil muddy which ruins the yield. The condition of the farmer is deplorable under the regime of this government... irrespective of any government this is how the situation became!

5.4.2 Outflow mobility

From the same mobility table (Table 5.4), we can derive now outflow mobility rates. The row percentages in Table 5.7 indicate the outflows from origins to destinations, in other words, the share of people originating in any particular class who are found to be in any other class (Breen 2004:18). Outflow rates tell us about the destinations of people coming from different origins, rather than the origins composition of the class of destination, that is one of the primary concerns of inflow mobility (Heath and Payne 2000:262). For this reason, outflow rates are used as a backbone of the analysis of relative mobility, or the likelihood of people from different class origins of moving to various class destinations.

Looking at the diagonal cells, we can see that intergenerational immobility has decreased across cohorts for all the classes of origins and the outflows have increased, especially from agrarian classes. In the first cohort, outflows are almost absent from the table: in the agrarian society sons usually followed their fathers' occupations and remained in the same class. The only exception is high salariat which is null among origins, but we saw in the inflow table that most of them came from large farmers in the first cohort. In the second and third cohort, the outflows from large farmers increased considerably: 34.7% of their sons still maintained the same class in the second cohort but the proportion decreased to only 15.2% in the third cohort. In the second cohort, most of them moved to middle farmers and a minority exit agriculture and moved to non-farm classes. In the third cohort, almost one-third of those who moved from large farmers fell in manual workers. The responses to the agrarian crisis and the demographic pressure on land adopted by the farmers are of different types. For instance, a farmer who owns few bighas of land and some cattle, but has limited financial resources, may decide to take a loan to buy more cattle or to lease in some extra land to achieve a viable holding size. Marginal farmers can also decide to take up casual manual work in nearby towns and hire labourers to cultivate their land during their

Table 5.7: Outflow percentages by cohorts.

Cohort 1	1 Destination							
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Cohort 1								
Large farmers	73.8	6.6	11.5	1.6	4.9	1.6		100
High salariat			•					
Middle farmers	0.0	3.2	64.5	29.0	3.2	0.0	•	100
Low salariat	0.0	0.0	0.0	66.7	0.0	33.3		100
Self-employed	0.0	50.0	0.0	0.0	50.0	0.0		100
Agricultural labourers	0.0	0.0	0.0	0.0	0.0	100.0		100
Manual workers		•	•		•			•
Total	44.1	5.9	26.5	11.8	4.9	6.9		100
Cohort 2			Desti	nation	<u> </u>			
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	34.7	4.2	29.5	13.7	4.2	6.3	7.4	100
High salariat	50.0	0.0	0.0	0.0	50.0	0.0	0.0	100
Middle farmers	8.2	0.0	40.8	26.5	4.1	6.1	14.3	100
Low salariat	0.0	14.3	14.3	28.6	0.0	14.3	28.6	100
Self-employed	0.0	0.0	14.3	14.3	42.9	0.0	28.6	100
Agricultural labourers	6.9	0.0	31.0	24.1	13.8	20.7	3.5	100
Manual workers								
Total	21.2	2.7	31.2	19.1	7.4	8.5	10.1	100
Cohort 3			Desti	nation	<u> </u>			
Origin	LF	HS	MF	LS	SE	AL	MW	- Total
Large farmers	15.2	5.1	35.4	7.6	8.9	0.0	27.9	100
High salariat	21.4	21.4	21.4	0.0	28.6	0.0	7.1	100
Middle farmers	7.8	0.0	22.2	4.4	22.2	12.2	31.1	100
Low salariat	4.6	2.3	18.2	20.5	22.7	4.6	27.3	100
Self-employed	0.0	0.0	13.3	20.0	40.0	0.0	26.7	100
Agricultural labourers	0.0	0.0	21.4	0.0	21.4	0.0	57.1	100
Manual workers	0.0	0.0	0.0	0.0	20.0	20.0	60.0	100
Total	9.2	3.1	24.5	8.4	19.5	5.4	29.9	100

Notes. High salariat and manual workers are accounted as structural zeros in the first and second cohorts when filled with a dot.

absence under the supervision of one of the other members of the household. Women are generally in charge of the cattle. Except for the *jati* of Thakurs, whose women are not allowed to work in the fields, women are used to taking the lead of farming when men go for outside work. In the case of nuclear households where sons are too young to work, and women cannot face alone the farming activity, the head alternates casual manual work with farming. Those who do not manage to combine both farming and casual manual work can lease out their land to a sharecropper, sell the cattle to cover the input cost and migrate out with their family to work all together in factories or construction sites. Finally, many are forced to lease out their land or sell their bullocks to take a loan in case of financial distress, or to repay the creditors when there are other options.

One of the strategies frequently adopted by sons of large farmers to protect their social position is to prevent the partitioning of the land property until the portion of land owned by the head of the household is large enough to make a living for all members of the household. In chapter 2, we provide evidence of households of large farmers being less likely to partition than other,⁴ which reinforces the hypotheses that large farmers' sons would prefer to live jointly and to contribute to the economy of scale within their household. Despite the agrarian crisis and the possibility to earn faster and better in other jobs, the dominant class of large farmers whose power lies on their landholding, are more oriented to save their social status rather than exit agriculture and convert in less prestigious occupations. The interview's excerpt below illustrates the case of a young man from the *jati* of Thakur, the *jati* of landlords in the zamindari system, who would never go for manual jobs at the risk of losing status, even though he complains about higher costs of production and lower returns in agriculture:

Me Have you ever worked as palledari (porter)?

Dipak (35, Thakur) No! (Denies firmly in raised tone)

Me And in Bhatta (brick-kiln)?

Dipak (35, Thakur) No, never. Nothing of that sort of work!

Me Why? Don't you need money?

Dipak (35, Thakur) This is not the kind of job to do in our system.

Me What does that mean, the system?

Dipak (35, Thakur) We have enough property, doesn't matter if it is un-

⁴The size of the land owned at t is negatively associated with the probability of partition at t+1 (see section A.4 in the Appendix)

der my parents. Any other kind of work would reduce our status because these are the jobs done by lower caste people.

However, the analysis of outflow rates shows clearly that the example of Dipak, whose remains in the class of large farmers as his father, concerns only a small minority. The fragmentation of land property is not the only problem. The reduction of the land size per capita is inevitable and leads to a situation where cultivation is not enough for all the members to make a living. Indeed, a response of another type consists of multiplying the sources of livelihood at the household and individual level alternating farming with other economic activities (i.e. agricultural labour and non-farm occupations). Pluri-activity is a common strategy for joint households where the allocation of the occupations among the sons generally depends on the willingness of the head. Commonly, the eldest son is assigned to agriculture: he is charged with taking care of his parents when they will be too old to work. The other sons are pushed to go and earn from other occupations.

As Mira explains, farming has high input costs, and money is needed for investing in cultivation. Hence, only pluri-activities within the same household can allow farmers to make some profit.

Mira (33, Thakur) There is no profit as such in farming, just that if my children are educated and work somewhere outside then we will have profit. In farming - we need constant investments such as fertilizers, pesticides and seeds, we need extra money for that.

Among the sons who partition after the death of the head, some inherit enough land for supplying the food demand of their nuclear household and sell the little surplus they produce, if there is any. In addition to farming, they do casual jobs to earn some money. On the one hand, the strategy of multiplying occupations allows middle farmers to maintain their status but, on the other hand, being busy with cultivation prevent them from seeking better jobs, getting trained or studying more, and reduces their availability for regular employment. Brijpal, 30 years old, is the eldest son of a large farmer, after the death of his father he and his brothers inherited 30 bighas of land which they decided to separate from the joint estate. Brijpal has two daughters and one son and farming is not enough to sustain his family economically, for this reason, he alternates farming with occasional manual jobs as a helper for masons:

Brijpal (30, Moria) Now look in my case, I have land but if I don't cultivate it then I will have a grim future but if I keep putting effort then

I will sustain the status. You might have observed that I keep putting effort in my farms. I leave house early in the morning to go to the farms and return by noon to take rest and take care of other works.

Me But, why don't you just look for a better job with a better income?

Brijpal (30, Moria) See, I am not educated, I am doing cultivation since childhood, my father did not send me to school because there was a lot of work in the fields, sowing, harvesting, irrigating. If we were rich, we could hire labourers, but we are not, returns are so little and there are so many problems with labourers, if we do batai (sharecropping) nothing is left for our family with only these bighas of land. What to do? I cannot leave and go to Punjab or elsewhere to work in factories and leaving back my agriculture. When my sons will grow up maybe they can look after the agriculture and I can go.

For those who cannot count on adult sons or brothers to help in cultivation, farming is a burden rather than a resource. Ramesh Chandra, used to commute to Moradabad daily to work in a factory before he left the job and came back to cultivation because he could not accommodate the two occupations.

Ramesh Chandra (57, Moria) My work was in a factory in Kal saheed road in Moradabad, I commuted there every day since early morning 5 o'clock to late in the night. The kids were small and used to go to school. Cattle was taken care by my wife, but it was no easy for her and moreover, I had some land which needed my attention, so I gave up the work there in the town and came back here

The reduction of the land size per capita is increasingly forcing the tradeoff between leasing out the land to migrate out in search of regular employment and staying in Palanpur to complement cultivation with agricultural labour and casual manual jobs in nearby towns.

Nanne (40, Teli) If someone is going through financial crisis or some difficult situation then they go out with their family and give the land as share cropping. While they go out, all other members of family also work. If only men go to work, then their family stays alone in the village. Now that is the choice, they will have to make whether they would like to go to other places to work or shall they wake up early in the morning, walk to the road and take some road transport to reach Moradabad. They may have to incur higher cost on transportation because they will have to pay Rs 30 instead of Rs 10 earlier by train.

The average wage for a beldari (mason's helper) would be, around Rs 300. Let's say they will spend Rs 100 a day for paying transport's fare and lunch but still they will have Rs 200 in hand.

Rania, a young woman who moved with her entire family from Palanpur to Baddi, in Himachal Pradesh, where she and her relatives are factory workers, explained to us that leasing out their land and working in Baddi has two advantages over remaining in Palanpur for cultivation. Migration allows women and children to also work in factories where they will not be exposed to villagers who could ruin their reputation. Working women are still considered a shame in the village. Second, it is easier to do some saving. In Baddi, Rania and her relatives, share a little room where they sleep and cook together after the long day of work. The room is located in a building, close to the industrial area, shared with a lot of migrant workers from Uttar Pradesh and Bihar. Rooms can be rented directly from the contractor (the same person who recruit the workers on behalf of the companies). A single room cost Rs 1700 per month, including the electricity bills. The rent and the food expenditures are the only expenses they need to afford out of their salary, which is on average Rs 7000 by month for 12 hours a day (8 hours plus 4 hours of overtime), six days per week.

Rania (26, Moria) Now the farming season is also approaching, we have leased out our lands, so we are not sure how well they are taking care of the land and cultivation. But we have been also keeping a regular vigil about the farming. Earlier we used to do all activities by ourselves - by our own hands. I had been doing it since my childhood, but we had to give the land to someone else so that we could come here to work. In the village, whatever we earn is spent on the expenses - we manage a mere living. You see, the crop is ready and harvested in an interval of six months but the other six months we have no work. Here and also there we get some work in that six months but here, no matter what we eat and how we live, at the end of the month we can save Rs 3000 anyhow, minimum. I am telling you a round figure, Rs 3000 is saved here if we all continue to work. That is not the case in farming - you can't save anything from Kheti- that is the difference!

That is also what Anuj, 23, Moria, son of a large farmer explained to us:

Anuj (23, Moria) Those people who migrate out they have less land here and don't have much income prospects. They find it suitable to stay outside and earn wage higher than what they can get here. The second thing (the first was the land size's argument) is that other family

members can also work at the same time while here the women do not work. Daughter and wife also work in some company. This way they earn and save more. In our case we have sufficient land as of now, but our next generation might have to migrate outside to work if the situation doesn't improve much.

Suresh also uses to migrate during the lean season (between planting and harvesting) to Punjab where he works as a mason. He explains that migrating to Punjab is more profitable than living in Palanpur and doing casual manual jobs:

Surej (26, Jatav) See, when I was working in Chandausi, I would sometimes not get my money on time, maybe a 500/- one time, a 200/- sometime else, what we would earn would go to waste for crops. But when we go bahar (outside) we earn monthly salary and the expenses are planned. You get the payment on time and you can bring some money back home. Earning from mazdoori (casual manual jobs) in village gets spent quickly, when you go outside then you can at least bring Rs 10,000- 15,000 to bring back home, you can take care of expenses at home and make some savings too.

However, it is crucial to keep in mind that in a context where the labour market is highly volatile, agriculture ensures the self-subsistence in case of hard times.

Suresh (40, Other) My income there (in Punjab) was much better and there is no problem of work availability, but after some time I needed to go back to Palanpur to harvest my wheat. There is all the food for my family to make rotis (bread) for one year. If you have some crops you will always manage to feed your stomach, but there (in Punjab) if I lose my job, I do not have anything to eat!

The security that agriculture ensures is not only for food consumption but also as mean of barter in case of necessity:

Anuj (26, Other) The loss is very huge, but there is a profit in agriculture as well. For instance, we cultivate wheat, the wheat we cultivate suffice for our food requirement. If we stop cultivating it and also we do not get a work in other field then where will we manage our food requirement from! By cultivating the land, we manage our food requirement and apart from that when some expenses have to be met then that is also derived by exchanging agricultural produce.

The changing composition of the occupational structure of the last decades has had a considerable impact on the agency of middle and large farmers and their shifts toward manual work has considerably increased. From the second to the third cohort the rate of outflows from large farmers to manual workers increased from 7.4% to 27.9%, and the share of those flowing from middle farmers' origins to manual workers has more than doubled from 14.3% to 31.1%. Among manual workers in the third cohort, 53% of them were also involved in cultivation as a secondary occupation (see Table A.2 in the Appendix), suggesting that the movement from middle farmers to manual workers implied a shift of cultivation from primary to secondary occupation. When the land has been fragmented too much, or it has been sold to face financial distress (e.g. to pay the dowry for marrying the daughters), the main alternative to migration is to earn from unskilled manual work in the surrounding labour markets.

Me You are a khesan (farmer) or a mazdoor (casual manual worker)?

Naresh (40, Thakur) Whichever I can find. When I have time for khesani (farming) I do, otherwise I do mazdoori (casual work). do you do khesani and when do you do mazdoori usually?

Naresh (40, Thakur) When the rains come, there is not so much work with crops, but now the summers will be here, and everyone will come to cut the wheat.

Me Where is the income more? Khetti (cultivation) or mazdoori?

Naresh (40, Thakur) Those who have more lands, they earn more from khesani and those with less lands they earn more from mazdoori. If someone has a couple of bighas his expenses will be more and where will he get the money? The one who has more lands, he earns more from the lands only.

Me Do you earn from khetti (cultivation)?

Naresh (40, Thakur) Yes, but the expenses are high, water, tractor, this and that, for everything, after that, what is left? The thing is that if there is a drought or some insects, and everything then comes from your pocket, you have to pay for the pesticides, water, for the tilling, then you cannot save anything on that. Everything goes from your pocket.

Since 2009 the proportion of the total working population involved in secondary occupations related to cultivation and livestock is about 40%, while before 2009 the proportion was as little as 2 to 10%. This evolution shows

that farming has become in the last decades a subsidiary occupation for most of the people primarily involved in non-farm occupations (see Table A.2 in the Appendix). The agricultural labourers, whose sons were all immobile in the first cohort, have benefited from the Green Revolution and the first phase of industrialization. This finding corroborates the income mobility analysis of Lanjouw and Stern (1998) which also shows that beyond the improvement of the harvest quality, most of the upward mobility experienced by agricultural labourers from 1958 to 1984 relates to occupational changes among landless households. The transition from agricultural labour to non-farm occupation was generally associated with upward mobility between 1974 and 1983 (Lanjouw and Stern 1998), especially because of opportunities of regular employment in the nearby cities. Indeed, landless households in the agrarian society were forced to work as labourers for the landlords, and they did not have any alternatives. The availability of employment opportunities outside Palanpur has reduced the dependence of landless households on agricultural labour. Indeed, in the second cohort, the rate of immobility fell to only 20.7% and in the third cohort is null. Most of the sons of agricultural labourers moved to the non-farm middle class in the second cohort and to manual workers in the third cohort. It is worth noting that agricultural labour is barely a full-time occupation, but it is mainly a temporary option for unemployed or under-employed. Indeed, it is very common for a marginal landowner to work part-time as a farmer, to perform agricultural labour at harvest time and to work as a wage employee or a casual worker during the slack season. In the first cohort, 23.3% of the middle farmers were doing agricultural labour as a secondary occupation (see Table A.2 in the Appendix), while in the second and the third cohort middle farmers mainly switched to casual manual work as a secondary occupation (11% and 18%). The mechanisation of agriculture during the Green Revolution and the reduction of the land properties have also reduced the demand for agricultural labourers. Moreover, wages are higher in casual manual work. Therefore, the sons of middle farmers have progressively substituted casual manual works to agricultural labour as a secondary occupation.

One of the most consistent trends emerging with the shift of agriculture (both farmers and labourers) from primary to the secondary occupation, is the outflow into manual workers from every class of origin. We can see in Table 5.7 that in the first cohort, the class of manual workers is absent from both origins and destinations. In the second, still, there are no fathers into manual workers, but in destinations, there are sons of middle farmers (14.3%), low salariat (28.6%) and self-employed (28.6%). In the third cohort, there are only five fathers into manual workers, but the class has become the destination of 30% of all the individuals. Sons of agricultural labourers

and sons of manual workers are more likely than others to fall into manual workers. The formation of the manual workers' class is quite recent in time (before 1984 nobody was primarily involved in this category of occupations); therefore, we cannot say much about the intergenerational trend of this class because it is structurally absent from the classes of origin. In the third cohort, 60% of the sons of manual workers fell in the same class. However, this proportion corresponds to only three cases, which is not enough to speculate on hereditary effects. Nevertheless, if opportunities of regular employment will not open up in the surrounding area, self-employed and manual workers will continue to grow in size, and as a consequence, immobility among these classes will also increase.

Surprisingly, the sons of large farmers in the third cohort were as likely as the sons of middle classes to move to manual workers (around 30% of them), while we expected the top class to have some advantages for moving to higher positions. In fact, the downward mobility of large farmers might be thricely biased by the attrition due to migration, the change in the *jati* composition of the large farmers in the last decades and the prevalence of manual work as entry job. We assume that the large farmers present in the last surveys are negatively selected because those who anticipated the forthcoming agrarian distress have leased out their land and migrated to get a better job outside Palanpur or invested on the education of their sons to increase their chances of upward mobility.

Indeed, as we discussed in Chapter 3, migration before 1993 was associated with regular employment. Moreover, Mukhopadhyay (2010) shows that after 1993, the reduction of the land size among farmers' households was positively associated with the probability to perform casual manual work outside Palanpur. Therefore, the sons of the large farmers who remained in Palanpur could constitute a sample of "left behind". Another reason for the sons of large farmers to move into manual workers in the third cohort could be that the population of large farmers have changed in terms of jati composition over time. If Thakur held the primacy of landholding in the early surveys, Moria became the largest farmers since the Green Revolution. Because Thakurs have an average level of education higher than Moria, it is very much possible that the outflows from large farmers among Moria are more likely to be downward than Thakurs. We further explore this hypothesis in the next chapter on the jati-class association. Finally, if manual work were more frequent at an early stage of the professional career, then mobility would be biased downwardly by a life cycle effect. We explore this hypothesis by looking at the intragenerational mobility from class (derived from the first occupation observed) to the class at T+1 (the second occupation observed).

As already discussed in the section on data and methods, the average

age at the second (observed) occupation is 36, which is considered the stage of professional maturity. If the probability of experiencing mobility at T+1 is higher for manual workers, it would mean that the hypothesis is verified. Conversely, if manual workers were as stable as the others during the life course, we should consider that manual worker is not a temporary but a durable status, and the hypothesis of a life effect bias would be rejected.

Table 5.8 shows the percentages of class transition from T to T+1 by cohorts of birth. Immobility of manual workers increased over time: from 27.3% of manual workers staying in the same class at T+1 in the second cohort to 82.9% in the third cohort. However, we must take into account the fact that in total there is 30% of missing observations at T+1. The class distribution of the missing at T+1 shown in Table 5.9 indicates a much higher proportion of missing among manual workers in the third cohort compared to the other classes.

The main reason for the missing to be higher in general in the third cohort is that the probability for the individuals born after 1975 to be surveyed more than one time is lower than those in the first and second birth cohort. A second reason is that manual workers tend to migrate seasonally and cyclically more frequently than others. Once adjusted with the missing, the proportion of manual workers being in the same class at T+1 is about 40%, which is still higher than all the other classes. Contrarily to the expectations of manual work to be more concentrated in the early stage of life and despite the casual nature of the categories of occupations held by manual workers, the class stability is higher than for other classes. Therefore, we reject the hypothesis of the life-cycle bias on downward mobility trends into manual workers. Moreover, this result reinforces the expectation of intergenerational immobility of manual workers increasing in future.

From Table 5.10 we can see that the intragenerational immobility rate, or class stability during the life course, has decreased over time, from 63.1% in the first cohort to 43.8% in the third cohort, which means that, with the diversification of the economy, mobility during the life course has increased for all. In the second cohort, immobility was a bit lower than in the third cohort. Conversely, the rate of upward and downward mobility was higher, due to the increasing involvement of agrarian classes into regular forms of employment and casual manual works.

The structure of opportunities has changed the most between the first and the second cohort. In the agrarian society, there were very few opportunities in non-farm occupations. In contrast, new opportunities opened up with the first phase of industrialization and the integration of the village economy with outside markets. In the third cohort, the intragenerational mobility appears as slightly more stable than the second cohort. Indeed, the largest share of

Table 5.8: Intragenerational mobility from first class to class at T+1 (row percentages)

Cohort 1			Destin	nation				
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	78.7	1.1	16.9	2.3	0.0	0.0	1.1	100
High salariat	0.0	57.1	14.3	14.3	0.0	0.0	14.3	100
Middle farmers	10.5	4.5	58.2	16.4	3.0	7.5	0.0	100
Low salariat	9.1	9.1	18.2	36.4	9.1	9.1	9.1	100
Self-employed	0.0	0.0	14.3	28.6	42.9	14.3	0.0	100
Agricultural labourers	9.1	0.0	18.2	18.2	9.1	36.4	9.1	100
Manual workers		•	•	•	•	•	•	100
Total	39.4	4.4	30.5	11.8	3.9	7.4	2.5	100
Cohort 2			Destin	nation				
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	47.1	2.9	38.2	8.8	2.9	0.0	0.0	100
High salariat	16.7	50.0	0.0	0.0	33.3	0.0	0.0	100
Middle farmers	5.9	2.0	41.2	2.0	13.7	15.7	19.6	100
Low salariat	9.1	12.1	24.2	24.2	12.1	6.1	12.1	100
Self-employed	12.5	0.0	0.0	0.0	75.0	0.0	12.5	100
Agricultural labourers	0.0	7.1	28.6	21.4	0.0	21.4	21.4	100
Manual workers	0.0	0.0	27.3	18.2	9.1	18.2	27.3	100
Total	15.3	6.4	31.2	10.8	13.4	9.6	13.4	100
Cohort 3			Destin	nation				
Origin	LF	HS	MF	LS	SE	AL	MW	Total
Large farmers	58.8	0.0	17.7	5.9	5.9	0.0	11.8	100
High salariat	0.0	46.7	16.7	10.0	0.0	0.0	16.7	100
Middle farmers	0.0	2.4	50.0	9.5	16.7	0.0	21.4	100
Low salariat	0.0	0.0	12.5	18.8	25.0	0.0	43.8	100
Self-employed	3.7	7.4	0.0	3.7	51.9	0.0	33.3	100
Agricultural labourers	0.0	0.0	10.0	10.0	20.0	20.0	40.0	100
Manual workers	0.0	2.9	11.4	2.9	0.0	0.0	82.9	100
Total	7.2	3.3	20.9	9.2	18.3	1.3	39.9	100

Notes. High salariat and manual workers are accounted as structural zeros in the first and second cohorts when filled with a dot.

Table 5.9: Distribution of individuals not observed at T+1 by class and cohort

			Destination								
		LF	HS	MF	LS	SE	AL	MW	Total		
Cohort 1	freq %	16 30.2	1 1.9	16.0 30.2		12.0 22.6	2 3.8	0.0	63 100		
Cohort 2	freq %	7 12.1	1 1.7	14.0 24.1	12.0 20.7	9.0 15.5	4 6.9	11 19.0	65 100		
Cohort 3	freq %	7 5.8	5 4.1	26.0 21.5	7.0 5.8	25.0 20.7	5 4.1	46 38.0	193 100		

Notes.

Table 5.10: Absolute intrageneration mobility rates by cohort.

	Cohort 1	Cohort 2	Cohort 3
Immobility	63.1	38.2	43.8
Upward mobility	11.8	12.8	6.9
Downward mobility	14.3	21.7	18.2
Horizontal mobility	10.8	27.3	31.1
Total mobility	36.9	61.8	56.2

Notes.

mobility corresponds to horizontal mobility (31%). However, any speculation on these trends is limited by the high proportion of missing observations which might affect the distribution.

Moreover, considering that the time gap between each survey is on average of ten years, the comparison of the individual's class at T and T+1 can only be taken as a rough indication of the total mobility pattern. We have no mean to take into account all the transitions that have possibly occurred between the two points of observation. Therefore, we should be cautious with the interpretation of the transition patterns, especially in this context of high labour fluctuations.

We can conclude from the analysis of the absolute mobility rates, that the patterns of absolute mobility, reflecting the structural changes, show a decrease of immobility and, respectively, an increase of mobility but mostly horizontal from agrarian class to non-agrarian class, and downward toward manual workers. The prevalence of downward and horizontal mobility over upward mobility is due to the meagre expansion of the non-manual classes, in particular high salariat, which only concerns a very marginal share of the population.

Before 1993, there could be a downward bias due to the migration attrition because migration was associated with regular employment. However, after 1993, commuting for casual manual work has become the prevalent pattern of mobility rather than migration for regular employment. The population in Palanpur seem to be trapped in the process of immiseration, where the only alternative to marginal farming is doing casual manual work. Indeed, the patterns of mobility of manual workers show signs of increasing intragenerational and intergeneration stability. Moreover, the chances of the individuals to more upwardly from manual worker to self-employed during the lifetime are limited due to the absence of formal vocational training to acquire skills in the construction sector and allied activities such as marble polishing or motorbike repairing. For a mazdoor (casual unskilled worker) to become a mistri (master, see Chapter 4 for more details), one needs to work as a chela (apprentice) for a long time before getting trained and gain enough reputation among the tikedars (contractors).⁵

However, only a few have the chance to get trained and upgrade their status. First, an apprentice is paid half than a casual manual worker on the labour mandi (labour market) so the economic return of the period of apprenticeship is very low. Second, mistri are reluctant to teach their skills

⁵The tikedar sub-contract a *tike* (task) to the *mistri* (skilled artisan or worker), and gives him an advance for hiring casual labourers to work under him. The *mistri* has the status of self-employed as well as the *tikedar*, who sometimes coincides with the mistri himself.

to apprentices because it is time-consuming and in return, the risk is to reinforce the competition on the market once the apprentices become trained and well connected with the tikedars. Surender is the only skilled painter in the village. He prefers to pay higher wages for casual workers rather than taking an apprentice with whom sharing his knowledge.

- Surender (28, Moria) The mistri will keep someone but avoids training them the skills. If mistri trains someone then the possibility of getting work is gone. If the beldari (helper) gets traineed all the skills are shared, then the mistri will be jobless. If the helper manages to get some contracts by his own, then why will he need a mistri anymore!
- Me So the mistri doesn't share all his knowledge with beldari (helper)?
- Surender (28, Moria) No, because the mistri also thinks that if he (the helper) learns all the skills, then the helper will not come to work for him anymore, so it is better to keep them as helper.

Based on this information, we can speculate that *mistri* and *tikedar* prefer to hire casual manual workers to avoid sharing knowledge and generate new competitors. Indeed, Bahadur explains to us that he can hardly work for the same *mistri* from the *labour mandir* (labour market):

- Me Why can't you work under the same tikedar every day?
- Bahadur (36, Jatav) Not all the works are available for longer duration, some of them are just for a day or two. We will work with another tikedar whosoever comes to hire us.
- Me But tikedar doesn't work for a single house, they have many contracts in hand and they could keep you as regular worker...
- Bahadur (36, Jatav) No, this never happens. They hire us for completing only segments of the houses. The work has to be done in a day or two and then halts.
- Me Suppose a tikedar comes and hire you for a work but the work is over in a single day, so you can take the mobile number of the tikedar and keep in touch for further contracts in the next days...
- Bahadur (36, Jatav) No it doesn't happen because tikedars don't give their number... when they need a worker then they can take someone else from the mandi. I don't have a fixed contract with the tikedar, this is not possible!

Third, being a *chela* (apprentice) requires also to accept symbolic domination and to show devotion to the *mistri*. Rajinder is a respected *mistri* in

marble polishing regularly hiring casual manual workers in Palanpur. Rajinder has been trained at a young age by Om Prakash, who has been himself trained by Udaivir, apparently the pioneer who introduced marble polishing in Palanpur in the 1990s. We asked Rajinder which are the characteristics than an apprentice should have to become a skilled marble polisher. He picked a twig from the ground and drow two lines at his feet saying:

Rajinder (48, Thakur) There are two things: first of all he should have the job-specific abilities (...). This depends really by the hand of the worker, by his precision. You must be careful and meticulous. (...) Then there is the attitude of the chela (apprentice) with the mistri, the respect. When a new beldari (helper) comes for the first time, the mistri gives him all the instructions. Instructions can be of any kind: "Bring me back a coffee; go and buy some liquor". He must bring him back whatever the mistri asks. The beldari (helper) has to accept everything; he must obeys. If the beldari (helper) shows obedience and respect, only then the mistri accepts to teach him the job, and he becomes his chela (apprentice).

The kind of relationship that links the apprentice to the mistri can be humiliating for some, especially if the *jati* of the mistri is inferior to the *jati* of the apprentice. Gangaram is a skilled self-employed mason; however, nobody has ever asked him for training:

Gangaram (36, Jatav) No one is ready to be a chela (apprentice), who needs to be patient and devoted. No one is ready to do this for little money. But I cannot pay more someone who wants to learn, because it asks me time and efforts and it is a loss.

Gangaram insists on the need for formal education for a *mistri* to experience further upward mobility. According to him, if a *mistri* had additional knowledge, he possibly could become an engineer. He deplores not having the possibility to get educated.

Me You became a mistri after you were a beldari. What can a mistri become in future?

Gangaram (36, Jatav) Many beldari (helpers) become mistri and after working as mistri for some time, if the person is educated a little bit, then they can become a tikedar because they have greater skills and notions of construction. Those who do not have education can become only mistri or small tikedars, but big tikedars are the one who are

educated, who have received an education or training in that field. (...) Not everyone can become a tikedar, even small tikedars, only intelligent and smart people can become tikedar. (...) The Mistri have the ability of fine details about the work. But a tikedar has also the mental ability to visualize things and make a mental calculation about estimates of the cost of construction. The person who is able to do all these can become a tikedar.

Gangaram (36, Jatav) "(...) Then if the mistri is skilled enough and works fine a mistri can also become an engineer.

Me So why couldn't you become an engineer?

Gangaram (36, Jatav) Only those who are educated can become an engineer (...) because someone educated has the knowledge of every tool and measurement. They can precisely design a house but a mistri only knows how to construct.

Not only education, but he would also need financial capacities to become a *tikedar* and dealing directly with the big contractors to get contracts and hiring labourers, instead of depending on other *tikedars*' demands.

Me But you have been working as mistri for the last 10 years so why can't you become if not an engineer a tikedar?

Gangaram (36, Jatav) One needs good financial backup to become a tikedar (...) there are possibilities that the owner may not pay on time, but the mistri has to pay the mazdoor (casual worker) on time so the tikedar must gave advance in any case from his pocket. The mazdoor will pretend their wages every day and if I don't have money then how can I afford to become a tikedar?

In turns, the financial shortcut that tikedars have to handle frequently with also acts like a demotivating factor for many casual workers to seek for continuity of work.

- Virpal (36, Moria) It's risky to work with the same tikedar again and again because they don't pay on time and seldom cheats while making the final settlement of the wages for longer works. They often cheat and take away a share of your earned money.
- Madhu (24, Jatav) We work for many days, and the tikedar promises to pay us at the end of the contract for all those days. But many times the tikedar disappears or goes away to some other place for work. In that case, we can't keep searching for him; therefore, we prefer to work every day and ask for the daily wage in the evening.

Sheesh Pal (30, Other) If you work for a short term project, a day or two, then you get the wage immediately. Working under the same tikedar for longer contracts delays the payment and the tikedars often cheat the workers. If you have worked for many days, then the collective wage your risk to lose is a big amount, while even if you lose one day wage is less.

While the analysis of absolute mobility provides a summary of the implications of the structural changes for the creation of new opportunities and the mobility patterns, we should turn to the study of relative mobility rates to determine the relative chances to access these opportunities according to the class of origin.

5.5 Relative mobility

The relative mobility, also called social fluidity, is less sensitive to the structural changes, in that it captures the mobility that may occur even if the occupational distributions among fathers and sons (the margins in Table 5.4) remained stable. Problems of margins arise when we want to compare mobility tables across countries or periods in time. In Palanpur, some classes shrank over time (e.g. large farmers), and some others emerged at a certain point of time and expanded in recent years (e.g. manual workers). In the standard literature of social mobility, the odds ratios are thought to be an efficient tool to provide comparable measures of the strength of association between the classes of origin and the classes of destination that form the mobility table. Indeed, the odds ratios indicate the ratio "between the frequency of being in one category and the frequency of not being in that category" (Knoke and Burke 1980:9). Instead of looking to a single specific destination (its proportion over the total), "the odds ratios compare the chances of getting to alternative destinations" (Heath 1981:262).

Using odds ratios, we can compare the probability of individuals from different origins to be in each class of destination rather than another. The odds ratio can assume values from 0 to plus infinite. If individuals with different origins had precisely the same probability of being in a specific class rather than another, the odds between the two classes compared would be equal, and the odds ratio would be equal to 1. An odds ratio equal to 1 means that the class of origin and the class of destination would be completely independent of one another (no association between origin and destination in the table). In that case, the chances of mobility would be irrespective of the class of origin, and thus we would be in a situation of perfect mobility.

Values from 0 to 1 indicate a comparative disadvantage of the class of origin of reference compared to the others, which means that the class of origin is negatively associated with a specific class of destination, and the chances to be in that class are less than for others. Inversely, the bigger than one the odds ratio, the stronger is the positive association between the class of origin and the class of destination. By positive association, we mean that the individuals with the class of origin x1 have more probabilities of being in the class of destination y1 than the probabilities that the individuals with the class of origin x2 have to be in the class of destination y1, all compared to the class of destination y2. We expect the odds ratios to be higher in the cells on the diagonal: the hereditary effect is posited to be higher, especially for the classes having a higher rate of intergenerational immobility.

For instance, from the mobility table (Table 5.4), we can calculate the probability of the large farmers' sons to remain immobile rather than moving into high salariat with the same chance for the sons of high salariat. By comparing these two probabilities (odds), we obtain an odds ratio of value 0.83 in the second cohort, which means that sons of large farmers, have fewer chances (0.83:1), relatively to the sons of high salariat to be large farmers rather than high salariat. In other words, those having origins in large farmers have a disadvantage for remaining in the same class, rather than moving to high salariat, compared to the sons or high salariat. In the third cohort, the same odds ratio is equal to 3, which means that sons of large farmers have three times more chances (3:1) to be immobile rather than mobile, compared to sons of high salariat. We can summarize all the possible odds ratios relative to one cell with the generalized odds ratio (GOR), which is the geometrical mean of all the odds ratios. The GOR is a synthetic measure of the social fluidity commonly used in the standard literature of social mobility. The interpretation of the GOR is the same as for the odds ratio: the higher the value of the GOR beyond value 1 the more the competitive advantage of the origin of reference for being in that class of destination (i.e. the more inequality of opportunity of mobility). The closer the GOR is to value 1, the higher equality of mobility chances (or social fluidity), and a GOR below 1 indicates a competitive disadvantage of the origin of reference.

Table 5.11 displays the generalised odds ratio GOR for each cell of the mobility table (Table 5.4). Except for the cells on the diagonal, the GOR has mostly value between 0 and 1, which means that the association between origins and destinations in the off-diagonal is weaker than in the diagonal.

 $^{^6}$ The probability of the sons of large farmer of remaining in the same class versus moving to high salariat is equal to 33/4=8.25. The same probability for the sons of high salariat is 1/0.1=10. The odds ratio is equal to 8.25/10=0.83.

Table 5.11: Relative mobility table by cohort (GOR)

Cohort 1	Destination						
Origin	LF	HS	MF	LS	SE	AL	$\overline{\mathrm{MW}}$
Large farmers	76.1	1.0	1.7	0.1	0.7	0.1	
High salariat							
Middle farmers	0.1	0.9	54.4	15.2	1.0	0.0	
Low salariat	0.5	0.3	0.2	15.5	0.3	8.1	
Self-employed	0.6	10.3	0.2	0.2	11.2	0.3	
Agricultural labourer	0.7	0.4	0.3	0.2	0.4	127.5	
Manual workers							

Cohort 2	Destination							
Origin	LF	HS	MF	LS	SE	AL	$\overline{\mathrm{MW}}$	
Large farmers	6.2	2.5	1.4	0.6	0.2	0.7	0.4	
High salariat	11.2	3.5	0.1	0.2	8.3	0.5	0.3	
Middle farmers	1.5	0.1	4.1	2.7	0.4	1.2	2.0	
Low salariat	0.1	16.6	0.6	2.0	0.1	2.6	3.5	
Self-employed	0.1	1.0	0.9	1.1	10.7	0.2	5.1	
Agricultural labourer	0.9	0.1	2.3	1.9	1.8	5.4	0.2	
Manual workers								

Cohort 3	Destination							
Origin	LF	HS	MF	LS	SE	AL	MW	
Large farmers	6.0	4.3	2.9	2.2	0.3	0.0	0.9	
High salariat	8.8	28.3	1.3	0.1	1.2	0.2	0.1	
Middle farmers	2.4	0.0	1.5	1.0	0.9	12.6	1.0	
Low salariat	0.7	0.8	0.7	4.9	0.6	1.9	0.5	
Self-employed	0.1	0.4	1.1	12.3	3.1	0.4	1.2	
Agricultural labourer	0.2	0.7	3.5	0.2	2.2	0.7	5.6	
Manual workers	0.4	1.4	0.1	0.4	0.9	27.8	2.7	

Notes. High salariat and manual workers are accounted as structural zeros in the first cohort and second cohorts when filled with a dot. We convert the other cells with zero frequency to the value 0.1 for convinience of calculation.

The GOR of large farmers has dramatically decreased from 76.1 in the first cohort, to 6 in the second and third cohort. Despite the persistence of the comparative advantage of large farmers to stay in the same class of their fathers, the magnitude of the advantage has decreased over time which reflects an increasing social fluidity of large farmers. Over time, the comparative advantage of large farmers for moving on high salariat has increased, as well as their advantage for moving into middle farmers and low salariat. For the whole period, they remained less likely to move to low class.

At the bottom of the hierarchy instead, the chances of upward mobility increased for the agricultural labourers. In the first cohort, they had the strongest comparative advantage for immobility rather mobility, which is in this a case a substantial disadvantage. In the second cohort, their advantage (i.e. disadvantage) for staying in the same class decreased considerably compared to the first cohort. Finally, in the third cohort, they were less likely to remain agricultural labourers than the others to fall in that class. In counterpart, they were more likely to move to middle farmers and self-employed than others.

The relative chances of immobility also decreased for middle farmers, but their chances of mobility with the transition toward a non-agrarian economy became mostly downward. In the second cohort, they had an advantage over the others for low salariat and large farmers. In contrast, in the third cohort, they lost their advantage for low salariat and became more likely to move either into large farmers or to agricultural labourers. The low salariat kept a comparative advantage for immobility. In the second cohort, they had a considerable advantage over the others for high salariat, but they lost it in the third cohort. Their relative chances to fall into agricultural labourers and manual workers also decreased in the third cohort. Overall, they remained quite stable over time. Also, the self-employed had a durable advantage for staying in the same class. Still, in the second and the third cohorts, their advantage for downward mobility into agricultural labourer and manual workers increased.

Finally, manual workers in the third cohort show a definite comparative advantage for immobility and horizontal mobility into agricultural labourers. Vice versa, agricultural labourers, are more likely than others to move to manual workers. Despite the increasing absolute mobility rates into manual workers from different origins, suggesting that the chances of downward mobility into manual workers also increased for individuals with higher origins, we can see that the sons of the low class have more chances than others to remain into the low class once we control for the structural effects. Indeed, none of the other classes of origins shows a similar level of disadvantage.

Overall, the relative immobility has decreased for all classes of origins.

The classes of large farmers and middle farmers have kept an advantage over the others to remain in agrarian classes. However, the relative chances of downward mobility have increased for middle farmers, especially in the third cohort. The sons of middle farmers who failed to become large farmers or to remain in the same class of their fathers are more likely to move downwardly into agricultural labourers and manual workers than others. The large farmers, instead, have an advantage for high salariat as an alternative to immobility. In the third cohort, however, they are more likely than others to experience downward mobility into middle farmers and low salariat. The non-farm middle classes (i.e. self-employed and low salariat), show more stability in their chances to remain immobile than others. However, both of them became more likely to move downwardly in the third cohort.

Manual workers and agricultural labourers have the strongest probability, compared to others, to remain at the bottom of the hierarchy. Nevertheless, agricultural labourers show also a comparative advantage for moving to self-employed and middle farmers and manual workers to move to high salariat. Despite the persistent disadvantage of the low class, new opportunities have opened up, and some have had access to these new opportunities, increasing their chances of upward mobility. The strength of association between the origins and destinations seem to have weakened over time, independently of the structural changes. We test this hypothesis with generalized linear models of patterns of association and interaction over time.

5.5.1 Log-linear analysis

A further step to analyse the mobility tables is to model the association and interaction patterns among the class of origin and the class of destination using generalized linear models. The stronger the association between origins and destinations, the less the social mobility we would expect because destinations are heavily influenced by origins. Conversely, the more the origins-destinations association is weak, the less the destinations of respondents are influenced by origins. The log-linear analysis is one of the standard techniques applied to the studies of social mobility (Hout 1983, Goldthorpe 1992, Luijkx 2017), mainly chosen for its flexibility (log-linear models have no special requirements and no need to distinguish between dependent and independent variables). This technique, compared to the generalized odds ratio calculated from the mobility tables, has the advantage of controlling for measurement errors (sampling errors are not present in this case because we use census kind of data).

We use log-linear models to test the hypothesis of the immobility decreasing over time, and the social fluidity to increase over time. Social fluidity

increases if the strength of the association between origins and destinations decrease. The logic is to define the most parsimonious model that describes the patterns of associations at best. We need to identify the significant associations in the mobility table, which explain the patterns of mobility the best. The procedure consists of testing the plausibility of a simplified representation of the essential patterns of association and interaction in the table to describe the observed frequencies thoroughly. For instance, in the model of perfect mobility, (all odds ratios equal to 1), the classes of destination are distributed proportionally to the sons of each class of origin, but, of course, no real mobility table will have such a precise proportional distribution in each row. This kind of distribution is a simplification of the reality under the assumption of perfect mobility (i.e. total independence between the class of origin and the class of destination). If the deviance of observed frequencies from the expected frequencies were statistically significant, it would mean that the parametrization of the expected frequencies does not explain fairly enough the main effects of the classes of origin and the classes of destination on the observed frequencies. Thus the null hypotheses of total independence between origins and destinations would be rejected. The modelling assumption is that any cell can be predicted by a linear combination of the parameters of the table (e.g. class of origin and class of destination). The parameters are of two types: the "main effects" of the single variable, and the "interaction effects" of the association between the variables included in the table.

The likelihood ratio chi-square statistic G^{27} measures the deviance between expected and observed frequencies, or the so-called goodness of fit of the model. The formula for G^2 is $2 \times \sum F(logF - logE)$ where F stands for observed cell frequency, and E is the expected cell frequency. The larger the absolute value of G^2 relative to the available degrees of freedom (number of terms missing from the saturated model), the larger the deviance of the observed frequencies from the expected frequencies; hence larger values of G^2 indicate a poorer fit. We consider the measure significant at the 5 per cent level (p<0.05). In addition to the G^2 , the Bayesian Information Criterion BIC is given, leading to nearly the same considerations.

As a premise, we need to look at the mobility tables described in the previous sections of this chapter as the combination of three components: the main effect of the class of origin (row sums), the main effect of the class of destination (column sums) and the interaction of these two effects (cell

 $^{^{7}}$ In the literature on log linear analysis the Likelihood Ratio Chi-Square is thought to be more advantageous or effective than Chi-Square statistics X^{2} when observed and expected frequencies in some cells are less than five (Ozdemir and Eyduran 2005), which is our case.

frequencies). In the models we want to test, we partition the expected frequencies for a cell into three terms, corresponding to each component of the table, where the interaction term represents the degree of non-independence of the class of destination and the class of origin. Since the question of research of our interest relates to the association between origins and destinations and its changes over time, we add a third component in the model, the birth cohort (CO) which also has a primary effect and an association effect when it interacts with the other parameters. If all the variables in the three-way table were independent of one another, we would be in a situation of perfect mobility. Thus there would be no need to include any association term in the linear function to predict the cell frequencies. The notation for the first model we test is the following:

$$Log(F_{ijk}) = \mu + \mu_i^0 + \mu_i^D + \mu_k^{CO}$$
 (5.1)

 F_{ijk} is the expected frequency in the cells of the table the conditions specified in the model; is the grand mean; μ_i^0 and μ_i^D are the effects pertaining to the origin and destination's variables, μ_k^{CO} account for the effects of the birth cohort's variable. In the first row of Table 5.12 we can see that we obtain a bad fit with this model as the p-value is less than to 0.001 and the G^2 is equal to 454.44 with 118 degrees of freedom, which indicates a very high deviance from observed frequencies. We reject the hypotheses of perfect mobility and conclude that some association terms must be modelled to fit the cells better. At the extreme opposite to perfect mobility, there is the so-called saturated model, which includes all the possible associations that might be conceived to explain the table:

$$Log(F_{ijk}) = \mu + \mu_i^0 + \mu_i^D + \mu_k^{CO} + \mu_k^{O \times CO} + \mu_k^{D \times CO} + \mu_k^{O \times D \times CO}$$

In the saturated model, the cell frequencies are affected by the main effect of each factor, by the effects of the two-way interactions between the three factors (O*CO, D*CO, O*D) and the effect of the three-way interaction (O*D*CO). Of course, such an exhaustive model would fit perfectly the data, but we are not interested in estimating this model precisely because the log-linear analysis aims to study which association terms are those that are the most important in describing the data. To do so, we must proceed by process of elimination: until the model results significant, we consider that it does not fit the observed frequencies and thus, we reject the hypothesis tested, and we add an additional term to the next model. We test the significance of the additional term on the improvement of the goodness of fit compared to the previous model by computing the likelihood chi-square test (G^2 test) given

Table 5.12: Log-linear analysis for origins, destinations and cohorts

	G2	d.f	p-value	BIC	LR test	p-value
Model 1: O+D+CO	454.4	110	< 0.001	199.6		
Model 2:	404.4	110	<0.001	-122.0		
Model 1 + $O \times CO + D \times CO$	251.9	96	< 0.001	-217.5	202.5	< 0.001
	96.6	60	0.002	-196.8	155.4	< 0.001
$\frac{\text{Model 4:}}{\text{Model 3} + \text{DIA} \times \text{CO}}$	64.9	58	0.249	-196.9	31.7	< 0.001
$\frac{\text{Model 5:}}{\text{Model 3} + \text{DIAG} \times \text{CO}}$	46.9	48	0.515	-187.8	49.6	0.535

Notes. Results are estimated using generalized Poisson log-linear regression. The total number of cells is 133. We omitted 14 cells from the analysis corresponding to the structural zero in the mobility tables (i.e. manual workers in cohort 1 and cohort 2), and we convert the other cells with zero frequency to the value 0.1 for convenience of calculation. Notation: O = origin, D = destination, CO = cohort, DIA = same coefficient for all diagonal cells, DIAG = different coefficient for each diagonal cell.

by the difference of their respective G^2 values. This measure has degrees of freedom equal to the difference in the number of parameters of each (Breen 2004). If the difference between the two models is statistically significant, it means the additional term has a significant effect on the prediction of the observed frequencies.

The second model, which is named the conditional independence model, posits that origins and destinations are independent within each cohort and only the margins (total distribution of origins and destinations) vary by cohort. The notation for Model 2 is:

$$Log(F_{ijk}) = \mu + \mu_i^0 + \mu_i^D + \mu_k^{CO} + \mu_k^{O \times CO} + \mu_k^{D \times CO}$$
 (5.2)

Compared to the first model, here we add the term $\mu_k^{O\times CO}$, the origin-cohort interaction's effect, and the term $\mu_k^{D\times CO}$, the destination-cohort interaction's effect. In this model we do not interact destination (D) with origin (O), because we treat them as entirely independent (like if all the odds ratio in the relative mobility table were equal to 1). Despite the significant improvement of the likelihood chi-square, the model does not fit well the data suggesting that, rather than marginal effects only, there should be a significant effect of the interaction between origins and destinations on the cell frequencies. Therefore, we reject the hypothesis of conditional independence, and we add the interaction term between origin and destination in the next model:

$$Log(F_{ijk}) = \mu + \mu_i^0 + \mu_i^D + \mu_k^{CO} + \mu_k^{O \times CO} + \mu_k^{D \times CO} + \mu_k^{D \times CO}$$
 (5.3)

This model, named "Constant Social Fluidity" (Erikson and Goldthorpe 1992, Goldthorpe 1987) postulates an association between origins and destinations which remains stable in time (i.e. identical relative rates of mobility for the three cohorts, and hence, no period's effects). The effect of $\mu_k^{D\times O}$ is significant and reduces considerably the G^2 , however, it is not yet enough to fit well the patterns of mobility of the table (the p-value is below 0.05). The hypothesis of constant social fluidity is rejected: the changes in the rates of mobility are due to the increase or decrease of the strength of association between origins and destinations net of the structural effects.

At this point, all the possible two-way interactions have been modelled, and the only further possible interactions are among the three variables (O,D,CO). If the classes were hierarchically defined, we could model the distance between the class of destination and the class of origin in each cell to account for patterns of vertical mobility versus downward mobility, but no hierarchical dimension is taken in account in this analysis. As an alternative,

we posit an effect among the cells with origins equal to destination in the next model.

In the fourth model, we estimate the hereditary effect (immobility) in interaction with cohorts. We add a parameter called DIA, whose coefficient is the same for all the cells on the diagonal. The logic of this model is to test the significance of the relative immobility over time. The hypothesis is that immobility change for all class of origins and destinations equally. The notation of the Model 4 is:

$$Log(F_{ijk}) = \mu + \mu_i^0 + \mu_i^D + \mu_k^{CO} + \mu_k^{O \times CO} + \mu_k^{D \times CO} + \mu_k^{DIA \times CO}$$
 (5.4)

The goodness of fit of Model 4 has significantly improved vis-a-vis the Model 3, and the p-value is not significant (0.249): the model is acceptable. The addition of the interaction term between hereditary effects and cohorts in the linear prediction contributes significantly to fit well the observed frequencies. Changes in immobility across cohorts, controlling for marginal effects, have a consistent effect on the patterns of mobility over time. Finally, we want to verify if the effect is the same for all the origins or if it varies with classes. In Model 5, we substitute DIA with DIAG (model 3 is the baseline), whose coefficient is different for each cell on the diagonal. The hypothesis is that the hereditary effect changes over time but not equally for all classes. This model fits even better the observed frequencies than Model 4.

We can conclude from this analysis that mobility has increased over time for all the classes. Still, the patterns of immobility (or mobility) vary with the class of origins, which implies that the hereditary effect is more persistent for some classes than for others, vice versa the chances of mobility increase at a different pace according to the class of origin. What are the reasons for such differences? Why the association between origins and destinations decrease more for some class than for others? In other words, why different chances of mobility or immobility are associated with different origins?

Beyond the effects of the origins on destinations, some other factors might also play a role. To provide a more comprehensive view of these associations over time, in the next section we estimate seven different logistic regression models accounting for the influence of other individual and household characteristics on the probabilities to access different social classes.

5.6 Behind and beyond origins

Until now, we have described the strength and the patterns of association between origins and destinations, and we have tested several hypotheses of social fluidity from the relative mobility table. We found evidence of the association between origins and destinations decreasing over time. We also found that the patterns of mobility vary according to the class of origin. The opportunities for mobility increased for all, but the chances to access these opportunities are not equal for all. In particular, the chances of upward mobility versus horizontal mobility and immobility follow different trends within the social structure. As the analysis stands, we ignore the fact that the influence of origins on the probability to experience different patterns of social mobility might be indirectly reinforced or weakened by other factors playing a role beyond or behind origins. Beyond, in the sense that these factors are not necessarily correlated with origins, but they still influence the destinations, enhancing or reducing the effect of the origins. Some other factors might be correlated with both origins and destinations, and in this sense, they would play a role behind origins. With reference to the much-discussed "OED triangle" (Blau and Duncan 1967, Mayer and Blossfeld 1990) which conceptualises the links between social origins (O), education (E) and social destination (D), education is assumed to be associated both with origins and destinations. In other words, the educational attainment of an individual is influenced by his social origins, and in turn, education influences his social destination. The remaining effect of origins on destinations, not mediated by education, is defined in the standard literature as the direct effect of the social origins on individuals' destinations, the DESO (Bernardi and Ballarino 2016). Indeed, the movements of the individuals within the social structure do no depend solely by the social origins, but also by other individual and household attributes which mediate the effect of origins on destinations.

The context studied in this thesis, calls for a more nuanced view of the link between origins and destinations, especially due to the role played by The modernization theory posits that the influence of *jatis* on destinations should decrease with the advent of the modern economy. The division of labour intrinsic to the caste hierarchy, as per the agrarian society, should get dissolved with the diversification of the economy and the creation of new occupations. Moreover, the education-destination association (ED) is assumed to steadily strengthen as a necessary response to the evolution of the economic organisation and the technologization of labour (Treiman 1970, Goldthorpe 2002), and the origins-destinations association (OE) to weaken because of greater equality of educational opportunity. In turn, the direct influence of the origins on destination (DESO) is expected to decline. According to this logic, "ascription will progressively give way to achievement via education, and societies will become increasingly meritocratic and mobile" (Goldthorpe 2014:5). By extension, the influence of jati on destinations should also be contained.

However, the progress of education in Palanpur has been marginal, and in

		1958	1964	1975	1984	1993	2009	2015
None	freq	150	144	156	180	182	121	98
	%	87.7	77.8	70.9	62.5	52.5	30.6	24.4
1st to 5th	freq	14	17	23	21	52	88	91
	%	8.2	9.2	10.5	7.3	15.0	22.3	22.7
6th to 8th	freq	6	11	18	35	55	73	72
	%	3.5	6.0	8.2	12.2	15.9	18.5	18.0
9th to 12th	freq	1	11	15	46	54	93	104
	%	0.6	6.0	6.8	16.0	15.6	23.5	25.9
above 12th	freq	0	2	8	6	4	20	36
	%	0.0	1.1	3.6	2.1	1.2	5.1	9.0
Total	freq	171	185	220	288	347	395	401
	%	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 5.13: Education level of working adult male population

Notes. Education level is divided in 5 categories: the first category includes the individuals reporting no school education and are illiterate, those with education till 5th standard are clubbed as "low primary", between 6th to 8th standard are clubbed as "middle primary", 9th to 12th standard are "secondary and high school", and beyond 12th standard are clubbed as "higher educated".

any case, it has not been influential in the taking or creating of the vast majority of new non-farm opportunities. The majority of the non-farm opportunities emerging with the structural transformations have not required any educational qualification, except few professional jobs performed by Palanpur villagers, like doctors, teachers or supervisors (high salariat jobs). In most cases, contacts, networks or inducement play an essential role in the access to high salariat positions, especially in government jobs. In this sense, education is not yet to be considered a driver of change. However, it may well become one soon, in particular, if the quality of education will improve at a similar rate as school attendance. The trend in the last decades seems to go into a direction of improvement (see Table 5.13). The adult males having completed a level of education beyond the secondary level, which is the highest standard of education in Palanpur, increased from 4 to 20 between 1993 and 2008 and up to 36 in 2015. Hence, higher educational attainment could, to some extent, influences the probability of being in the upper class, independently of the social origins. Apart from jati and education, age is also a relevant factor affecting the chances of mobility for the reasons already discussed in the section on data and methods. Age determines the physical capacity and thus, indirectly, the range of possibilities that one has. The young men have more strength and health, as Ashok explains:

Ashok (23, Jatav) The only reason why I don't stay here with my father to do cultivation is that I am physically capable and fit; this is the age where I can work at my best to earn. If I can't manage my family now, then what scope is there for the future. This (casual manual work) is not a business; in business also women can sit and work at one place but women and old people are not capable of taking up manual hard labour, they don't have strength equal to young men to perform such heavy work.

Hence, we expect young people to be more likely to perform jobs involving hardship than the eldest. But the physical differential is not the only effect of age. There is also a life-cycle effect: mobility can also occur during the life course with the evolution of the career. The analysis of the intergenerational mobility shows that mobility has increased over time, but horizontal mobility prevailed over vertical mobility in the last decades. Nevertheless, some occupations are more likely to happen in the early stage of life rather than when the professional maturity is reached and vice versa.

Marriage is another factor that has a life-cycle effect. As we mentioned already, in the local society, one has more chances to get married if the reputation of the family and the potential spouse is good. A good reputation also depends on the kind of occupation performed. Boys are judged by the girl's families based on their capacity to guarantee the economic security of the future family but also on their social status which depends by the degree of prestige associated to his occupation and collectively recognized by the community. Enjoying a good reputation is also essential to get higher offers of dowry from the girls' side. Every family will be reluctant to pay a dowry for her daughters to marry a precarious or unemployed boy, as Suney Pal's example illustrates. Suney Pal is a heavy drunker, he only works a couple of days per month, and he does not contribute anything to the finance of the family. Everyone knows about Suney Pal conducts in the village, and his reputation is spoiled. During the interview, his parents confessed to us their anxiety about the future of their son.

Suney Pal's mother (44, Moria) Nobody will ever marry him. He is a bekaar (useless lazy man), everybody knows it! He goes and drinks with Jatavs and acts like crazy. In the morning, he is so sick of hangover that

he cannot work, he stays like that, roaming around and doing nothing. Nobody will ever trust us if our son is not capable of earning his life and working hard. Who will want to pay the dowry for a beekar like him?

Most of the marriages in rural society are arranged through personal and family contacts, rather than web services or broker agencies. Once the connection has been made with the family of the potential spouse, a meeting is arranged between the two families. First, the parents interview the boy and the girl respectively, and they have some general discussion. In some cases, the young couple can meet in a separate room to speak to one another alone for a short while. At the end of the first meeting, if they are all enthusiastic about the matching, a second meeting can be fixed. During the second meeting, the parents start to negotiate about the dowry and the conditions to forge their alliance. Sometimes, a third meeting is necessary, but it is rare. The negotiation can also continue by phone.

There are some variations from family to family and from *jati* to *jati* to this general arrangement procedure, however in all cases, before the first meeting to happen, the two families conduct some research though the social connections they have in the villages of the potential spouses. For instance, they ask neighbours about the family's reputation, whether the boy drinks or smokes, whether he has a good job, and he contributes to the community. Concerning the girl, the most important thing for the future family's in law is that she has never had any previous love affairs or arrangement failures. Sangeetha, 26, is from the *jati* of Passis, who are considered by the other villagers to have lax customs. Sangeetha benefited from a scholarship given to scheduled caste communities and studied geography until B.A. She explained to us that she had a boy in mind for her marriage. They met in the marriage of a common relative. The boy is from the same community, but he does not fit the expectations of Sangeetha's father.

Me Has your father a boy in mind for you?

Sangeetha (20, Other) There is someone who I am in a relationship with, and we are considering him.

Me Did your father ask you before considering this boy?

Sangeetha (20, Other) It is everyone's choice; it has to be decided all together. I went to this wedding, and this boy liked me, and he got my number from someone, and he called me, and I made him speak to my mother first, and she told the boy – "We will get her to marry you only if we like you and your situation". He also sent his photo on

WhatsApp, because when I was at the marriage, I haven't seen him, but my mother saw him and liked him, but my father did not like him, and he said, that the boy is from Saharanpur but stays in Delhi for working and my father did not like this.

Me What is the problem with Saharanpur and Delhi?"

Sangeetha (20, Other) My father is thinking...(hesitation) The boy he is also like us, daily wage people, and my father is thinking even that women in Saharanpur they work as housemaids, so my father thinks that if tomorrow they send me to work in people's houses, what will happen then? That is why my father does not like him.

The example of Sangeetha shows how the occupation of the potential spouse matters for marriages. But later in the interview, we understood that the boy's status is not the only reason for Sangeetha's father's scepticism:

Me What work is that boy doing actually?

Sangeetha (20, Other) He works in a factory office, he goes to homes to fix ACs, and he gets 10,000 Rs a month

Me But this is not such a bad job! Your father is doing palledari (porter), which is a much harder job for a lesser income. I do not understand...

Sangeetha (20, Other) See, my brother has this thing that they do not want me to work in private companies or elsewhere in Delhi. My brother needs to get married too, what if they come to know that his sister works outside? The reputation of the family will be ruined; they will think – they are bad people, they are so poor that they marry their daughter to a boy who makes her wife work in other's people houses. This is badnami (infamy, shame) you see.

It is a matter of pride and honour for the families to make sure that their daughters will not have to work during their married life. For all these reasons, we expect adult married males to have a higher position than unmarried males.

Beyond the individual characteristics, we should also take into account some households characteristics: the size of the household and the land-holding and the birth ranking of the sons. We know that the probability to partition is negatively associated with the landholding size (see Chapter 2 for more details). Hence, smaller households have probably partitioned and have a smaller landholding. We expect individuals belonging to smaller households to be more likely to rely on non-farm occupations than individuals belonging from larger households. Finally, the birth ranking of sons

might also influence the association of origins and destinations through the process of decision making, which generally happens at the household level, especially in joint families. The allocation of the occupations among the sons depends on the willingness of the head. As mentioned before, among households of large farmers, the eldest son is commonly assigned to the duty of cultivation. The eldest son is potentially the subsequent head of the family. For this reason, he must supervise the property of the families and provide the economic security of his parents during their their old age. Moreover, since the eldest is the first to get married, he could not migrate with his family because there is the expectation of his wife to cook and look after the domestic work for the family in law. According to this logic, the eldest sons of large farmers should be more likely to be immobile than move to other classes.

5.6.1 Models' specification

We estimate the relative influence of these factors on the strength of association between origins and destinations over the life course in seven logistic regression models. For each model, the dependent variable (y_i) is the probability to access the class of destination, and the independent variable is the class of origin $(class_f)$. We add controls at the individual level (X_i) , household level (Z_{hh}) and time. The classes of origin are included as dummies, and large farmers is the reference category. The additional individual controls are age, education and marital status. Age is a categorical variable of three cohorts (15-24; 24-44 and more than 45 years), and the reference category is from 15 to 24 years old, so then we compare the class probability in a phase of professional maturity with the early stage of the career of an individual. Education is a dummy variable for secondary education or beyond: we compare lower education levels to high educational attainment. Marital status is a dummy variable for married. At the household level, we include a dummy for the eldest son and a continuous variable for household size to proxy the landholding. We control the time effects with three variables: the survey's year, the number of years between each survey and age. 9 Age captures the life course effects and survey year captures the period effects. We also control for the interaction between year and age (the life cycle effects interacted with the period's effects).

⁸We not include landholding directly to avoid problems of collinearity with origins (the agrarian classes are partly defined on the basis of the size of the landholding).

⁹We do not use birth cohort to avoid problems of collinearity.

The first model is:

$$y_i = class_f + X_i + Z_{bh} + year + age \times year + \epsilon_o$$
 (Model 1)

where:

 y_i = probability of an individual to be in a destination class

 $class_f = class of origin$

 $X_i = \text{invidual characteristics}$

 Z_{hh} = household characteristics

For each class of destination, we also run a second model where we include the jati dummies as an additional control, and we observe the differences between the two models. We avoid making complex calculations to allow formal comparisons of the parameters estimates taking into account the rescaling effects in nested models. The purpose of this comparison is only explorative. Therefore, we merely eyeball the variation of the sign and the significance of the origins' coefficients with the jati controls. We consider the changes as an indication of the influence that jati has on the origins-destinations association. The association between jati and destinations is furtherly analyzed in the next chapter. The second model is given by adding the regressor "jati" to the specification of the Model 1 (Model 2 = Model 1 + jati):

$$y_i = class_f + X_i + Z_{hh} + year + age \times year + jati + \epsilon_o$$
 (Model 2)

By construction, "others" is a heterogeneous group of *jati*, and for this reason, we fix it as the category of reference for the *jati* dummies. In the two models, the analysis is restricted to the sample of adult males having been matched with their fathers class. Standard errors are clustered at the household level in all the models.

5.6.2 Results

In line with what we observed from the relative mobility table, the coefficients of the first model show that the probability of accessing large farmers is negatively associated with all the other origins than large farmers, which confirms that large farmers have an advantage over the others for immobility (Table 5.14). However, once we control for *jati*, the association with low

¹⁰Adding explanatory variables to a logistic model increases the variance of the outcome. When the outcome is rescaled, model parameters are also rescaled, so then the estimates may differ because of confounding and/or rescaling. To examine formally the difference, operations like y-standardisation are required.

salariat, self-employed and agricultural labourers lose the statistical significance (Table 5.15).

In counterpart, Thakur and Moria are significantly and positively associated with the probability of being large farmers, compared to the group of "other" jatis. The likelihood to be a large farmer increases during the life course. Indeed, cultivation is more frequent among retired people. When sons become adult, the head stays back home to look after the farm or supervise the work of the labourers while his sons dedicate themselves to complementary occupations. Education loses the statistical significance with the jatic control, which possibly indicates a correlation between education and jatic. Thakurs and Moria are indeed more educated than others. Being the eldest son also increases the probability to become a large farmer, and so do the household size. The expectations mentioned above are thus verified in the case of large farmers.

The probability of becoming middle farmers is not significantly associated with any *jati* but being sons of low salariat and self-employed is a disadvantage, compared to large farmers. Sons of non-agrarian classes are less likely to become middle farmers during the whole life course. Similarly to large farmers, also for middle farmers, the probability increases with age.

Horizontal mobility or immobility is more plausible among low salariat rather than downward mobility. Thakurs are more likely than others to become low salariat, while Moria and Jatav are less likely. Education is negatively associated with low salariat. Indeed, most of the jobs performed by the individuals from the class of low salariat are factory jobs or guards of shop employees, which do not require special qualifications. The self-employed have an advantage for immobility, even controlling for *jati*. Moria and Jatav have less chances to be self-employed compared to others.

In the first model, the probability of becoming agricultural labourers is positively associated with the origins of middle farmers, low salariat, agricultural labourers and manual workers. Large farmers have fewer risks than others to fall into this class, at any time during the life course. But once we control for *jati* in the second model, only the association with manual workers and agricultural labourers remain significant, which suggest that independently from the *jati* and all the other characteristics controlled for, having origins in low class increase the probability to be immobile. Telis are more likely than others to be agricultural labourers. Historically the Telis were landless, and despite the transition of many of them into profitable businesses in the last decades, some of the poorest households in Palanpur are still found in the *jati* of Teli. Still at the bottom, the probability of becoming manual workers is negatively associated with the origins of high salariat and positively associated with agricultural labourers and manual workers.

Table 5.14: Logit estimates: class destination probabilities (Model 1)

	(LF)	(HS)	(MF)	(LS)	(SE)	(AL)	(MW)
High salariat	0.28 (0.68)	1.96** (0.87)	-0.34 (0.61)	$0.95 \\ (0.67)$	0.94 (0.66)	0.00	-2.02* (1.06)
Middle farmers	-1.80*** (0.32)	$0.55 \\ (0.39)$	0.13 (0.18)	0.49** (0.24)	0.61** (0.24)	1.21*** (0.44)	0.30 (0.22)
Low salariat	-2.50*** (0.89)	1.18* (0.64)	-0.59* (0.31)	1.13*** (0.36)	0.57* (0.32)	1.44** (0.70)	0.43 (0.31)
Self-employed	-1.87* (1.03)	1.31* (0.73)	-1.08* (0.65)	$0.35 \\ (0.63)$	1.65*** (0.54)	0.34 (1.13)	0.63 (0.41)
Agricultural labourers	-2.53*** (0.76)	1.33*** (0.49)	-0.12 (0.25)	-0.24 (0.39)	$0.44 \\ (0.37)$	2.36*** (0.47)	0.78** (0.31)
Manual workers	0.00	0.00	0.00	0.00	-0.19 (1.11)	2.71* (1.40)	1.80** (0.81)
Age 24-44	-0.62 (0.45)	-0.22 (0.86)	-0.26 (0.77)	1.13 (0.78)	0.13 (0.41)	1.15** (0.48)	-0.22 (0.37)
Age +45	2.33** (1.12)	1.36 (0.99)	0.70* (0.41)	1.61** (0.78)	-0.62 (0.61)	-0.14 (0.63)	-1.61*** (0.45)
Secondary education	0.46* (0.26)	2.21*** (0.29)	-0.20 (0.18)	-0.34 (0.23)	$0.00 \\ (0.22)$	-0.07 (0.49)	-0.54*** (0.21)
Married	-0.20 (0.22)	-0.06 (0.46)	0.26 (0.18)	0.53** (0.23)	-0.06 (0.28)	-0.15 (0.36)	-0.63** (0.25)
Eldest son	0.44*** (0.17)	0.22 (0.30)	-0.09 (0.12)	-0.01 (0.19)	-0.04 (0.19)	-0.03 (0.27)	-0.29* (0.17)
HH size	0.16*** (0.04)	-0.02 (0.03)	-0.02 (0.02)	-0.04 (0.02)	-0.01 (0.04)	-0.21*** (0.06)	-0.10*** (0.03)
Observations Pseudo- R^2	1264 0.32	1110 0.17	1264 0.05	1183 0.09	1216 0.09	1089 0.21	1096 0.19

Standard errors in parentheses

^{*} p<0.10, ** p<0.05, *** p<0.01

Table 5.15: Logit estimates: class destination probabilities (with jati) (Model 2)

	(LF)	(HS)	(MF)	(LS)	(SE)	(AL)	(MW)
High salariat	0.53 (0.73)	1.47 (0.90)	-0.39 (0.62)	0.99 (0.67)	0.69 (0.63)	0.69 (0.63)	-1.94* (1.10)
Middle farmers	-1.02*** (0.38)	0.43 (0.38)	0.05 (0.20)	0.62** (0.26)	0.31 (0.26)	0.31 (0.26)	0.01 (0.24)
Low salariat	-1.24 (0.85)	0.72 (0.62)	-0.72** (0.34)	1.01** (0.39)	$0.15 \\ (0.35)$	$0.15 \\ (0.35)$	0.31 (0.35)
Self-employed	-1.32 (0.98)	1.00 (0.69)	-1.10* (0.66)	0.13 (0.61)	1.32** (0.52)	1.32** (0.52)	0.79* (0.45)
Agricultural labourers	-0.84 (0.85)	2.08*** (0.54)	-0.29 (0.28)	$0.05 \\ (0.42)$	0.20 (0.40)	0.20 (0.40)	$0.14 \\ (0.35)$
Manual workers	0.00	0.00	0.00	0.00	-0.72 (1.07)	-0.72 (1.07)	1.70** (0.84)
Thakur	0.75* (0.44)	-0.30 (0.31)	-0.33 (0.24)	0.65** (0.26)	-0.31 (0.29)	-0.31 (0.29)	-0.30 (0.31)
Moria	2.11*** (0.40)	-1.33*** (0.43)	-0.29 (0.24)	-0.90*** (0.34)	-0.80** (0.32)	-0.80** (0.32)	-0.29 (0.32)
Jatav	-0.41 (0.57)	0.00	0.27 (0.26)	-1.59*** (0.49)	-1.28*** (0.42)	-1.28*** (0.42)	1.45*** (0.32)
Teli	0.00	-1.58*** (0.60)	-0.35 (0.30)	-0.51 (0.39)	0.44 (0.29)	0.44 (0.29)	0.21 (0.40)
Age 24-44	-0.38 (0.60)	-0.27 (0.89)	-0.25 (0.77)	1.19 (0.83)	0.07 (0.42)	0.07 (0.42)	-0.19 (0.36)
$\mathrm{Age}\ +45$	2.59** (1.14)	1.10 (0.99)	0.77* (0.42)	1.52* (0.82)	-0.80 (0.63)	-0.80 (0.63)	-1.52*** (0.46)
Secondary education	0.32 (0.28)	2.24*** (0.31)	-0.12 (0.18)	-0.62** (0.26)	-0.01 (0.21)	-0.01 (0.21)	-0.38* (0.22)
Married	-0.41 (0.25)	-0.01 (0.49)	0.25 (0.18)	0.62** (0.24)	-0.03 (0.28)	-0.03 (0.28)	-0.71*** (0.25)
Eldest son	0.40** (0.18)	0.12 (0.31)	-0.12 (0.13)	0.12 (0.20)	0.01 (0.19)	0.01 (0.19)	-0.36** (0.18)
HH size	0.15*** (0.05)	-0.02 (0.03)	-0.02 (0.02)	-0.03 (0.02)	-0.02 (0.04)	-0.02 (0.04)	-0.12*** (0.03)
Observations Psuedo- R^2	1132 0.38	948 0.20	1264 0.06	1183 0.15	1216 0.12	1216 0.12	1096 0.23

Standard errors in parentheses

^{*} p<0.10, ** p<0.05, *** p<0.01

Compared to large farmers, the disadvantage of the low-class origins for upward mobility is again confirmed. However, large farmers, compared to high salariat, have more chances to fall into this class. Once we control for the *jati*, Jatav absorbs most of the association between low-class origins and the destination class of manual workers: only high salariat remains significantly and negatively associated and self-employed become positively and significantly associated. In the case of manual workers, there are also significant lifecycle effects. The probability decreases with age, which means that manual workers are more likely to be young men and/or unmarried (being married decreases the probability). The household size has a negative and significant association with manual workers: the members of partitioned households are more likely to be manual workers. Finally, being the eldest son decreased the probability to be manual workers.

At the top of the social structure, the probability to be high salariat is highly influenced by *jati*: only agricultural labourers remain significantly and positively associated with the probability of being high salariat compared to large farmers. In contrast, the association with other origins lose the statistical significance once we control for *jati*. Moria and Teli are negatively associated with the probability to be high salariat compared to others. The role of the reservation quotas, especially for services in railways, might explain the advantage of agricultural labourers and other *jatis* (all ranked below Thakur and Moria).

However, this result should not lead us to over-speculate on the role of positive discrimination on the mobility of the landless labourers. We found evidence in the previous studies on Palanpur of the (less than) minimal impact of reservation quotas in favour of poor households (Himanshu, Lanjouw and Sern 2018, Lanjouw and Stern 1998). To the best of our knowledge, there has been only one case of a scheduled-caste and landless person benefiting from job reservation in Palanpur. This man was one of the village sweepers also working as an agricultural labourer and obtained a well-paid job in the railways through job reservation. Education is strongly associated with the destination high salariat, independently of origins and jati. In this case, education works as an equalizer, confirming the modernization thesis. At present, the level of educational attainment of the population is probably still too low to show much impact on upward mobility. With increasing participation in higher education amongst the younger generation, there is the expectation of the role of education to develop opportunities for professional occupations and expand the size of high salariat class.

However, education has a cost, and not everyone could afford the higher education of their children. Education has a cost in terms of scholar fees and additional expenses for books and stationery materials but in terms of labour force loss for landless households and marginal farmers. Surej, complains about the expenses for higher education.

Surej (47, Jatav) He (his son) has only done B.A. He could have continued his studies, but I did not have much money to afford his education. My other sons are also studying so I have to manage the expenses of their education too so I can't support more than one son for higher education. In order to support their education, I take loans from someone or the other. Usually a small farmers like me can only afford high school education for one of their children, after that it becomes unaffordable - there are also tuition fee to be paid between 500 - 800 Rs a month.

One of the main reason for the high costs of education and limited access to secondary education is the weakness of the public schools and the increasing demand for private schools. In 2015, almost two-thirds of Palanpur children enrolled at school used to go to private schools. The shift to private education that could, on the one hand, improve the quality of the education among the villagers, on the other hand, could also contribute to the rise of inequality and thus a decline of the equalising role of education on the opportunity of social mobility to high salariat class. Indeed, the public primary school in Palanpur, which is very poor in terms of schooling conditions and regular attendance by teachers, is generally frequented by the poorer and Jatav households. The others prefer to send their children to a private school in the neighbouring area.

Beyond economic inequalities, there are also other factors, like the personal aspirations and the progressive attitude toward the social and economic change of the individuals, that mediate the role of education on upward mobility. These factors could not be recorded in the surveys, but the information we collect in the interviews highlighted their crucial role. For many, the incentive for investing in education is primarily the renewed prestige, while others look with hope to education as a significant chance of improving earning opportunities and upward mobility. The differences in the subjective expectations from education translate into different economic and social support of parents to the education of their sons.

The maximum aspirations of the young boys (aged 15-25) we interviewed is to access a government job (e.g. police, railway employee or teacher). However, employment opportunities in the government sector are far from being entirely determined by educational achievements. For those parents who do not have contacts with the public sector or enough resources to pay bribes, there is only a weak incentive to invest in the education of their sons. Getting a job in the railways is the aspiration of Anuj, 24, Moria. Anuj's

father owns 30 bighas of land, Anuj assists him in cultivation and studies B.A. in political science.

- Anuj (24, Moria) There are many educated young guys in this village, and maximum of them are here in our residential area (meaning where all Thakur live). But none of them have got a government job. There is not much improvement in the education system. The elderly always questions us What will you do after you become educated? There are too many BA and MA degree holders in the village, go and find work!

 If the Degree holders would get a good job then they will also value education, but they think otherwise.
- **Anuj's mother**: (In a sarcastic tone) Even if only one person had gotten the government job then also the others would have been motivated
- Anuj (24, Moria) There are many people who have BA and MA degrees but they got married and they have no more willing to prepare for the entry tests for government jobs. Now people say that what is the use of degrees if it cannot get a job? It is demotivating.

Anuj explained to us that his elder brother also tried some years before to become a government servant in the railways but he failed, he wanted to try the next year, but their sister had to get married so the family was facing a financial shortage and they discouraged him because they could not pay the bribe. Ramesh, 60, Thakur, complains about the absence of returns from his investment on his son's education because of the corruption in government jobs.

Ramesh (60, Thakur) People have high expectation for their future (...). Like I was always optimist that my children will get educated and will join a government job someday. I used to explore advertisement in the newspaper and used to feel optimist for their future but now they have finished their education and have been applying for the government jobs, but they are getting any call. They ask for money - 50,000 Rs and more so I find it absolutely hopeless because I don't have money.

While we were in Palanpur for fieldwork in 2018, the Indian Railways opened 62.000 vacancies at entry job levels like trackmen, gatemen and helpers. More than 19 million candidates applied, at least 40% of the applicants were university graduates or post-graduates, according to railway recruitment board figures. In Uttar Pradesh, the media always report a superabundance of candidates applying for government jobs. The Uttar Pradesh police advertised in 2019 for 62 peon posts and received 93.000 application,

including PhD holders, despite the fact that the minimum requirement for the job was primary education. However, according to the elements we collected in the interviews, it seems that is not the scarcity of jobs that push the younger generation to apply for government jobs, but the poor quality of the available jobs, in terms of remuneration and job security.

Me Why you think that government jobs are better? The wages are higher in private factories and firms...

Amuj (24, Moria) No! Government job is better!

Me But the income is less in government jobs, isn't it?

Amuj (24, Moria) I think that income is higher in the government job and work pressure is also less. In the private job there are a lot of work pressure and income is relatively less. People have to wait for getting job everyday in the private firms but in government job the work hours is limited to 8 hours everyday. I am not sure about whether I will get a job in railways, if I don't then I perhaps will work in private firms for 12 hours.

However, Nanne, 40, Teli, points out that government job should not be the only reason why to invest on education, and in case of failures, there are other alternatives to come in private companies. He blames the absence of willingness and entrepreneurial attitudes of the young generation.

- Nanne (40, Teli) I mean a good education is very much needed because I have lived my life now, but the age ahead is of computer therefore education is very important. Even if I have a bike repairing shop then it is going to be operated through computer. If someone has knowledge of computer then he can fit in the job but if he is not educated enough then he will not have any job.
- Me That is true but the level of education in the village is very low. People are willing to spend more and more on marriages but not in education. I did not meet many people concerned and willing to invest in education, but they are very much ready to invest money in marriages even if they have to borrow a good amount. Why is that so?
- Nanne (40, Teli) It's the carelessness. They are not smart enough to make speculations for the future. They don't work in the first place then where will they manage the expenses for education or for any other investments? There is much other type so expenses such as stationary, tuition, school fees and uniform. Everything requires money and they have no source of income because they don't work. They do not have

the mind setting to take up the initiative. The situation can be resolved only when they are firm enough to take up the challenge to earn and look forward.

- Me But many young people complain because they do not find any job even after having completed higher secondary school...
- Nanne (40, Teli) Yes they have studied, and they might have also applied for the job somewhere but didn't get selected. But if they did not get a job so they should look up for the alternatives and some work that would assist them to sustain their living. Without job they are wasting their time and ruining the best part of their lives.
- Me So how have you planned for the future of your son? As I know there is no certainty that one would get job even after the completion of education, moreover you will have to pay a bribe to get him a job. How all these things affect your consideration about your son's future?
- Nanne (40, Teli) I have only this believe that if he scores well at school and have learned it well the computer knowledge then there are many companies in the private sector which pays far better than that of the government sector so he can get job there. Government jobs is not everything in life! Private companies would prefer candidates who have good knowledge and computing skills. Anyone who completes B.A. degree is not just enough until he's also good. There are cases of people obtaining a degree through unfair means, but if you are not good you can only hope to get a government job and going in circles as a buffalo on a leash.

The case of Nanne is an interesting example of intergenerational and intragenerational upward mobility. Nanne belongs to a Muslim *jati* of oil pressers historically landless. His father was an agricultural labourer and only after the land reforms he got ten bighas of land. Nanne and his brothers worked hard as casual manual workers in brass polishing workshops in Moradabad and after some years managed to jointly buy 18 additional bighas of land. Later, Nanne got a job in the railways as a helper. One day, he met a traveller from Nepal at the railway station of Jurgaon in Palanpur. This guy was going to Delhi where he worked in a shop of motorbike repairing. Soon after, Nanne joined him in Delhi and got trained by him. When he came back to Palanpur, he found employment in a motorcycle repairing shop in Chandausi. After a couple of years, he opened his shop. Over time, with the growth of his business, he was able to establish a flour mill and to invest in mentha extraction plant, which is a profitable business for his family. They invested part of the incomes from non-farm sources in agriculture and

generated higher farm income. With the increase of incomes from non-farm activities, the household leased in more than 40 bighas of land and also leased out a substantial amount of land. By providing training to others in motor-bike repairing Nanne has also helped other villagers to get employed and in some cases to establish their repair shops.

Despite the low class of origin and the historical *jati* disadvantage of Teli, Nanne followed an exemplary upward trajectory, which brought him respect and admiration. Everybody uses to refer to Nanne as "Nanne mistri" in the village. On the other hand, this kind of upward mobility from low *jati* group participates in exacerbating the sense of rivalry among the upper *jati* experiencing downward mobility. We find evidence that the *jati* continues to influence the unequal access to opportunities of social mobility. In the next chapter, we study the *jati*-class association and its influence on social mobility.

5.7 Conclusion

In this chapter, we attempted to answer several questions concerning trends and patterns of social mobility in Palanpur. Firstly, we studied the influence of the structural transformations on the absolute mobility, comparing the rates of inflow and outflow mobility across three cohorts of individuals, born respectively before 1955, from 1955 to 1975 and after 1975. The three birth cohorts proxied the period effects. We compare the social positions of fathers and sons from the aftermath of the Zamindari regime, the Green Revolution, the first phase of the industrialization and up to the transition to the modern economy and the integration with the outside labour markets.

The structural transformations have had an effect on the shape of the class structure: large farmers have decreased in size, while new non-farm classes have emerged and/or expanded considerably in the last decades (i.e. manual workers and self-employed). At the top of the social structure, the class of high salariat has not increased much over the survey period. Contrarily to what has been observed in industrialized countries, the room at the top has decreased rather than increased throughout the modernization process. Therefore, mobility in absolute terms has been mostly downward from the top class to middle and low classes. However, the population observed in Palanpur is, to some extent, downwardly biased by the migration attrition: those who migrated before 1993 were more likely to have better regular employment than those left behind in the village. After 1993, the downward bias is limited in that the prevalent patterns of spatial mobility for work has become commuting and not migration.

Interestingly, comparing absolute mobility rates in Palanpur with the existing research about the whole national picture (c.f. Vaid 2018 and others reviewed in Chapter 1), the rural-urban divide appears as very striking. The national figures display a higher surplus of upward over downward mobility in India, though the surplus is not as large in India as in the developed countries (Vaid 2018:165). In Palanpur, we find that downward mobility accounted for more than half of the total movements happened over the three cohorts, reflecting the lack of opportunities for upward mobility in rural areas.

In the 1980s, several local mills were operative in nearby towns and offered regular employment to dozens of young males from Palanpur. However, in the third cohort, casual manual works and self-employment have substituted regular employments. The class of low salariat has shrunk in size and the movements into manual workers and self-employed have become prevalent among the residents. The large farmers increasingly moved to middle farmers, and middle farmers increasingly moved to self-employed, agricultural labourers and manual workers. The sons of agricultural labourers benefited from some opportunities of upward mobility during the Green Revolution and the first phase of industrialization, but in the third cohort, they became more likely to move to manual workers than other destinations. Manual workers, which constitute a new class, seem to be highly immobile in the third cohort. The analysis of the intragenerational mobility did not provide enough evidence to reject the hypothesis of possible life-cycle bias.

However, the information collected in interviews highlights some of the factors which prevent manual workers to be upwardly mobile and become self-employed. The main factor is the absence of formal vocational training for professions like marble polishers, masons, mechanics etc. The training is only informal and requires a long period of apprenticeship among a skilled self-employed who is willing to teach the job. The apprentices are poorly paid, less than casual manual workers. Moreover, the apprentices have to show their devotion to their master and to obey to any kind of request, which could be humiliating for some. On top of everything, the skilled artisans are reluctant to teach their workers the skills because they fear to generate future competitors and lose their competitive advantage on the market. Becoming a self-employed also requires some financial backup to pay daily wages to the labourers with advances. Moreover, the personal attitude and the capacity of learning, which are subjective characteristics, can make the difference. Most of the skilled artisans in Palanpur who get direct contracts from the contractors and hire workers have shown a strong entrepreneurial attitude.

Second, looking at the social fluidity over time, we find that the opportunities for mobility are not equally accessible in terms of origins. From the relative mobility table, we tested the hypothesis that the social fluidity has

increased with the modernization, controlling for the structural effects (contraction or expansion of some classes). Social fluidity has increased for all, but at a different pace, and the chances of experiencing different patterns of mobility vary with the classes of origins. At the top of the class structure, large farmers have been increasingly exposed to the risk of downward mobility toward middle classes. However, they still have a relative advantage compared to the probabilities of the others to be large farmers. The chances of the high salariat to remain immobile rather than experiencing downward mobility have increased over time, compared to the others. In this sense, the top class have preserved their privileges through a persistent hereditary effect. Middle farmers lost the advantage they had during the Green Revolution to stay in the same class. On the one hand, their chances to become large farmers increased with the changing composition of the c landlords' community. On the other hand, their probabilities of experiencing downward mobility into agricultural labourers with the transition to a modern economy increased considerably, compared to the others. Finally, those having origins in low classes display higher intergenerational stability rates, despite a general improvement of the opportunity of upward mobility of agricultural labourers in the second cohort. Manual workers and agricultural labourers have a strong disadvantage compared to others of experiencing upward mobility.

The variation identified in the patterns of mobility and the relative chances of mobility call for a more nuanced view, mainly due to the role played by jati and education. In the third part of the chapter, we estimated and discussed the relative influence of other individuals and households characteristics on the association between origins and destinations. We find that education acts as an equalizer, increasing the probability to access high salariat class, independently of the class of origins. However, the educational attainment is not entirely dissociated from the social origins because it depends partly on jati. Moreover, the equalizing role of education is sensitive to economic inequalities. Indeed, the poor quality of the public schools push the wealthy households to enrol their children in private schools. The spread of private education has had a positive effect on the improvement of the education quality and the level of educational attainment of the villagers (Himanshu, Lanjouw and Stern, 2018), however it could also contribute to widening the inequality of chances to access high salariat positions. Moreover, the access to government jobs is often subjected to the payment of bribes. Apart from high salariat, the education attainment does not have any significant influence on the probabilities to access other destinations, probably because the majority of the non-farm occupations performed by the villagers do not require any particular qualification. However, the other way round explanation

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is also valid: the progress in education is so weak that only poorly qualified jobs are available to the villagers exiting agriculture.

The probabilities of being farmers increase with age. With the multiplication of the sources of livelihood at the household level, it is a common strategy to assign the eldest to cultivation while the youngest do non-farm occupations. A further explanation is that retired men usually claim to be farmers even if they are not actively involved in doing agriculture: their status is preserved until the property is entitled to them. In contrast, the influence of age decreases the probability of being manual workers. The significant influence of age gives additional credit to the hypothesis that high rates of intergenerational immobility among manual workers could be biased by life-cycle effects.

Moreover, we find that the household strategy of the occupational allocation matters in the individual patterns of mobility: the eldest sons are more likely to be large farmers and less likely to be manual workers. The marital status and the model of the household also have an influence. Adult males of partitioned families and unmarried males have more chances to be manual workers or agricultural labourers than others. Finally, we found that, for each class of destinations, the *jati* origins absorb most of the association between origins and destinations. In the literature review, we extensively discussed the influence of caste on the social stratification in India. The division of labour in the agrarian society was intrinsic to the caste system, but with the modernization, we expect the association between jati and destination to weaken. The jati-class association over time in Palanpur is the object of the next chapter.

Chapter 6

The jati-class association

6.1 Introduction

Unlike class, caste is an ascribed status transmitted from one generation to the next and forming a kin-group (or caste lineage). The caste membership remains invariant for the life duration of an individual and inter-caste mobility is strictly impossible. Only episodes of caste groups collectively rising their status by sanskritising their rituals have been acknowledged in the literature. The collective mobility of a caste, described as a phenomenon of sanskritization, implies an emulation of the customs, rites and beliefs of the dominant castes and the adoption of a brahmanic lifestyle, though theoretically forbidden by ancestral rules of caste division (Srinivas, 1952).

In the agrarian society, the dominance of the caste was strongly linked to the landowning: land was a symbol of wealth and a social marker of prestige. The social prestige translates in higher social status. The landless castes were subordinated to the landlords through economic relations of patronage and were considered to have a low social status. With the process of westernization, the numerical presence within the caste group of educated persons and the prestige of the occupations performed by its members have also become important criteria of dominance.

We showed in the previous chapter that with the reduction of the landholding size per household and the need to diversify the sources of livelihood, large and middle farmers' households have to work themselves in cultivation rather than hire agricultural labourers. From the Green Revolution onward, the wages of non-farm casual work became higher than wages of agricultural labour, so the labour offer reduced. Conversely, the economic returns of agriculture became insufficient to pay extra workforce except for a couple of days during harvesting and thus the labour demand for agriculture has also reduced. The increasing need for self-cultivation has also had consequences on the labour value of the children. Investing on education of the sons has a cost in terms of labour force loss and seeking for prestigious occupations require to migrate which has a cost in terms of agriculture loss. Hence, it became almost impossible for the historical dominant castes to concentrate in their group all the elements of dominance: land, education and occupational prestige. As a consequence, we would expect the criteria defining the social status hierarchy to change in kind and composition.

However, the disappearance of the caste-wise division of labour where economic relations were embedded in social relations sanctioned by custom and morality and marked by hierarchy in the idiom of ritual purity and impurity (Srinivas, 2003:455), does not necessarily imply that caste does not contribute to shaping conditions of unequal access to better opportunities. For some, the change in the basic structure of production has not changed the social structure of accumulation in the modern labour market (Harris-White 2003). Some castes would use inherited privileges to control the access to better opportunities and prevent the mobility of other castes.

In particular, three effects would contribute to the persistence of the caste inequality: the occupational ranking based on residual perception of purity and impurity, the network effects, or opportunity hoarding, and the categorical exclusion regardless of the individual characteristics (Mosse, 2016). Moreover, the caste's prejudice can be self-exclusionary on the form of lack of confidence and narrowed aspirations, of collectively exclusionary on the form of discrimination. Srinivas, at the end of his life, advocated for the resilience of caste rather than its erosion "while caste as a system is dead, individual castes are flourishing" (2003: 458). According to Mukherjee, class subsumes caste and with the two would overlap in the labour market (Mukherjee, 1999). On the contrary, Beteille argues the class system was subsumed under the caste structure in the traditional society, where the ordering of landownership and social status were closely associated with the caste order, but with the disintegration of the jajmani system and the emergence of new occupations which are historically associated with any caste, there would be a dissociation of class relations from the caste structure (Beteille, 2011). Sharma resolves the puzzling debate about caste influencing class or class influencing caste arguing that it works both ways, class inheriting in caste and vice versa (Sharma, 2013).

Undoubtedly, there is an association between caste and class, however it is not clear whether the strength of the association between caste and class has declined with the modernisation and the economic transformations. Kolenda (2003), argues that with the modernization, we observe a "differentiation of occupation within a caste" suggesting that castes become more

heterogeneous in terms of class composition. On the other side, Deshpande (2017) shows that the degree of caste inequality (economic) is unimproved, and wealth is still concentrated in the upper castes; moreover, she argues that greater wealth and faster growth worsened the gap and caste remains the most important determinants of life chances.

In the previous chapter, we found evidence of the influence of the caste, at the $jati^1$ level, on the probability to access different class of destination in Palanpur. The aim of this chapter is to verify whether the association between class and jati has weakened over time and to estimate the influence of the jati on the chances of upward mobility. Himanshu, Lanjouw and Stern (2018) found that increasing inequality in Palanpur has largely become in recent decades a within-caste phenomenon, rather than being driven primarily by differences in average income across castes (2019:318). If income was highly associated with class, this finding would suggest that social mobility within jati were increasing. We showed in Chapter 4 that classes are moderately associated with income deciles, however we did not find congruent patterns of association with the hierarchical dimension of the class schema. Manual workers are associated with the 9th top decile of the income distribution: low class positions do not necessarily correspond to low income level.

Indeed, there is evidence of wages from casual manual work being often higher than wages of regular factory jobs. Therefore, increasing income inequality would not systematically correspond to experiences of social mobility. However, as previously discussed (see section 4.4), the link between income and class could be biased because class is identified at the individual level, while income is measured at the household level and divided by the number of adult working males to obtain an approximated indicator of the individual income. The hypothesis of increasing social mobility within *jati*, and thus a greater heterogenization of the class distribution by jati, need to be assessed. In the first part of this chapter, we provide qualitative evidence of the jati to continue to influence the idea of prestige associated with different categories of occupations. Drawing on selected excerpts of the interviews, we argue that each jati develops occupational preferences specific to the caste group which result from a combination of stigma, norms and necessity. In the second section, we measure the class segregation by jati over time and describe the jati's composition by class. In addition, we measure the strength of association between jati and class over time and finally, in

¹From here onward we refer to the caste in Palanpur using the jati unit of analysis. The *jati* is the proper endogamous group which defines the caste-lineage. There is a large consensus among anthropologists and sociologists of *jati* being the main sociological referent for the word "caste" and the most pertinent unit of analysis.

the last part, we estimate the *jati*'s influence on the probability to experience upward mobility.

6.2 Research questions and hypothesis

The caste system has been historically associated with caste-specific occupations inherited by birth and any movement of a caste's member from his hereditary occupation to another is to be considered a form of social mobility within the caste structure. However, a movement away from the occupational inheritance does not indicate necessarily upward mobility. In the previous chapter, we found that the social fluidity has increased over time but not at the same pace for all classes. We found that, beyond the association between the class of origin and the destination, other factors also play a role in the shaping of different patterns of social mobility. One of the most influential factors is the *jati* membership.

In this chapter, we are interested in the influence of *jati* on the access to better opportunities. The analysis we provide of the association between the *jati* and the class of destinations over time in Palanpur intend to answer a much-debated question: does the association between caste and class decline with the modernization? Do some caste group keep persistent advantages or disadvantages in terms of upward mobility opportunities?

In the literature we found a *continuum* of positions to this respect (see Chapter 1 for the review of the literature), however all the longitudinal studies existing, to our knowledge, only use a broad categorization of caste. Due to sample size limitations or the absence of detailed information in official data at the national level, the four administrative categories Upper Caste, Other Backward Classes, Scheduled Castes and Scheduled Tribes are usually used to proxy the jati effect. However, the problem of using the administrative categories to study the influence of caste on social mobility or the class inequalities within caste is that the administrative classification is precisely based on homogenous socio-economic characteristics among groups of jati. The category of other backward classes is continuously updated because of some jatis highly ranked as per the caste hierarchy but claiming their right for reservations quotas because of the pauperisation they are going throughout. Using these categories to study the congruence between caste and class and the caste mobility has two consequences: the simplification but also the distortion of the reality.

With this analysis we intend to contribute to the study of the direct effect of *jati* on the social mobility. More specifically we intend to answer the following questions: are certain *jati* groups disadvantaged from the opportu-

nity of being upwardly mobile? Are the opportunities of mobility different for different jati? The jati at the extreme poles of the social hierarchy, where trends of opportunity hoarding, and deprivation are more resistant should be more likely to remain socially immobile that the jati in the middle of the social hierarchy where social mobility is higher. The jati schema we use in the analysis is composed by the following jati: Thakur, Moria, Jatav and Teli. All together account for the large majority of the population and each of them is representative of a crucial position in the caste hierarchy of the village but also at large of the country. The residual jati are aggregated in a reference category names Other: each jati included in this category account for less than three households in the village. While showing the groups "other" in the statistics and including it in the count of the total population for the measurement of rates and probabilities, we do not comment its trends and patterns because of the internal heterogeneity of jati.

We ask whether the association between the social status hierarchy, based on the ritual order of caste, with the class hierarchy is reproduced in Palanpur despite the emergence of caste-free occupations. We ask whether the association between *jati* and class is stable over time or whether it weakens and if so, we ask whether it declined at the same pace for all *jatis*. Finally, we estimate with a multinomial logisitic regression the marginal effects of each *jati*, interacted with the social origin, on the chances of experiencing upward mobility, and controlling for other individuals and households characteristics. We expect the classes to become less segregated in terms of caste composition and vice versa the caste distribution across class to be more heterogeneous. We expect the influence of *jati* on class destinations to weaken.

6.3 Jati and occupations: stigma, norms and necessity

With the transition to a modern economy, in Palanpur there has been a decline of between-caste income inequality along with a rise in overall inequality from 1983 to 2008, which means that caste is becoming a less important predictor of relative economic position in the village (Himanshu, Lanjuw and Stern, 2018). The expanding availability of non-farm jobs and the increasing integration of the village economy with the outside labour market, has provided opportunities to individuals of various *jati* to shift out of previous agricultural labour and convert into non-farm occupations. One of the consequence of the transition has been a sharp fall in poverty among the most disadvantaged *jati* (Himanshu, Lanjouw and Stern, 2018).

However, it is not clear if the reduction of income inequality between *jatis* and the economic advancement of the most backwards groups reflects also an increase of equality in terms of opportunities for upward mobility. Because the sources of income depend less on landowning and more on the capacity to access non-farm opportunities, we could expect that the *jati* inequalities rooted in the agrarian society have weakened. Sunita's husband is a middle farmer who descends from a family of large landowners, however with the fragmentation of land they cannot rely anymore only on farming to make a living. Sunita explains that all the *jatis* who previously relied on cultivation are facing the same crisis and must react the same way:

Me Who owns the highest share of land in this village?

Sunita (45, Moria) Some Thakur own more than Moria and some Moria earn more than Thakur... but no one has enough land, everyone owns medium size of land now. The intergenerational change has led to a shift in the structure of land ownership. Some had 100 bighas, now they have 25 each because they had four sons, now their sons will get 2 bigha each. My grandchildren will get 0.5 each (...) Not just Thakurs, but no other jati can depend on land alone. (...) Those who have wealth can do anything but those who don't have money they only have problems. Therefore, some work has to be done for everyone. Apart from farming, there is also the need to do other works outside.

However, her son nuanced her statement highlighting the persistence of some inequalities between different *jatis*:

Anuj (23, Moria) Let me explain: Moria and Thakur have some property but Jatav do not have property. Those Jatav who have property do not go to work in bhatta (brick-kilns). Some Jatav are wealthier than Thakur and Moria, but those who don't have property at all and family size is larger than they will have to work there.

In the interviews, we asked a set of questions concerning the tendency of each *jati* to stick to a particular occupation, and we stressed the respondents about the reasons for such segmentation of work by *jati* (for more details on the questions see the interview guidelines in section A.1). In the narratives, we found a sharp division between the notions of *bare jati* (superior *jati*) versus *chote jati* (inferior *jati*) which is common to all the respondents. Not only members of superior *jati* call the others inferior *jati* and vice versa, but also members of inferior *jati* identify themselves as such while talking about their *jati* community.

Bare jati perform bara kaam (superior occupations) while chote jati perform chota kaam (inferior occupations). At least, this is the reality depicted by most of the Thakurs we interviewed who explained that superior jati have superior mental abilities and thus they must prefer naukri jobs (salariat jobs), while inferior jati are only good for doing mazdoor (casual work). However not all the Thakurs manage to find some regular employment in shops or factories or to develop a petty business, as an alternative to cultivation. Some of them are pushed by necessity to opt for casual manual work, however, none of them would never consider working in brick-kilns because they consider making bricks in furnaces a denigrating occupation. Jatav are mostly involved in casual work in brick-kilns, where very hard and physical work on the outside are required, but the economic returns are higher than from low salariat occupations nor even many forms of self-employment. In constrast, the Thakurs involved in casual manual work are mostly doing palledari (porters), which is also a denigrating physical work involving serious health illness. According to all the respondents, from whatever jati, confirmed that not a single Thakur has ever worked in brick-kiln except some who provided only tractor facilities for bricks delivering as self-employed. We interviewed one of them and heavily insisted on the fact that he was not involved in bricks moulding. We tried to understand why the two occupations are considered so different in Thakur's perception.

Me What are the works done by Thakur?

Gangaram (38, Jatav) Those who are poor work as mazdoor. Most of them derive their income from their land through sharecropping arrangements. Otherwise, they often go to work outside in the cities as palledari.

Me Why don't they work from Palanpur for instance in bhatta (brick-kilns) if they are poor?

Gangaram (38, Jatav) Because for them that is an inferior work.

Me What about palledari (porter) work?

Gangaram (38, Jatav) In that work, they earn well, and after they finish the work, they take a bath and freshen up to return here as if they were rich, as if they were returning after working in office. While, if they work in bhatta then everyone can see them and mock them.

Me Why Jatav work in bhatta mostly?

Gangaram (38, Jatav) Jatav do not have money, no land; they are more in need, they can work in anything to sustain the living of their family. That is why Jatav work in bhatta.

Me Why Thakur have this opinion of inferiority and superiority?

Gangaram (38, Jatav) They think of themselves as "Badi Jati" (superior jatis) they consider us 'Choti Jati' (inferior jatis), they call their caste as superior. Suppose we are sitting together and talking, so we have a brotherly interaction, but they don't have these sentiments.

The aversion of Thakurs to brick-kilns is an issue of social distancing from the Jatavs rather than a preference based on an economic rationale. Doing bricks is considered by Thakur as impure, because of the contact with the earth, the sun exposure which tans the skin, and the promiscuity among migrants' workers. Drawing on an ethnography among seasonal migrant workers in Jharkhand, Shah (2006) argues that brick-kilns are for scheduled castes, a space of freedom from the ritual norms and the purity restrictions imposed by the dominant castes in the village. According to her, love affairs take place in brick-kilns. In Palanpur we have heard some stories of women being harassed in brick-kilns and of young unmarried couples dispelling and migrating to brick-kilns. A certain idea of social prestige associated with the occupational choice of different jati persists in the common perception of the villagers and overlap with the structures of socio-economic disadvantages.

Manish (36, Moria) There are many unemployed people in the village but work in bhatta is dependent on the jati. Moria and Thakur do not work in bhatta, Jatav work in it. People choose a profession according to their (hesitation)... See the five fingers of the hand are not equal, likewise Thakur, Brahman and Moria have got the advantage by the God. The lower jati also has some resources, but less than others, they aren't educated, and the family size is also higher, so they have to migrate to work in bhatta or elsewhere as mazdoor.

The previous caste division of labour where lower *jati* were assigned to impure tasks is reproduced despite the occupational transition from the agrarian economy to the non-farm labour market and apply to new occupations.

Me What is a chote kaam (inferior work) and what is a bade kaam (superior work)?

Sunni (30, Moria) Let's say some chota kaam ... let's say road cleaning. Such jobs of cleaning are generally done by choti jati (inferior jati) whereas badi jati (superior jati) are ashamed of working in it. So badi jati will not be willing to do this job because if choti jati makes fun of this thing then there will be a tension between them, and it may result in a clash. Let's assume cleaning of certain area fetches Rs 500.

A person from badi jati will never agree to do this job even if you offer Rs 1000 for it. On the other hand, if there's an office-based work, a good work, he will be happy to work even at wage of Rs 4 but he can't be happy at Rs 1000 in chota kaam. Because it defames his status therefore, we call it chota kaam (inferior occupation).

When we asked to Ramesh why only Jatav works in brick-kiln and not Thakurs he answers with disdain and use to call the Jatav "Chamar" (the common term used to designate the untouchable) to emphasize the social distance between Thakur and Jatav.

Ramesh (51, Thakur) Only Chamars can do this work because they are "Choti Jati" they have been working in it from the past. The other work they do is cleaning etc... because they are "Choti Jati".

However, when we questioned him about the economic returns of brickkilns casual work, he recognizes that wages can be higher than wages of low salariat employment. This paradox illustrates the contrast between the prestige and the income level associated with different categories of occupations. The economic return matters less than the prestige among Thakurs who denigrate the casual manual work and prefer the salariat jobs, irrespective of the income differences. In the agrarian society, Thakurs were the largest landlords in the village: they tied the labourers to themselves in a relationship that has been defined in the literature as patronage. In exchange of payment in kind the labourers cultivated the fields of the patron, while the patrons restricted at the maximum self-cultivation to reinforces his domination over the others. Wealth corresponded to the class and converted into a concentration of power among the dominant jatis. Despite the economic transformations, Thakurs are more concerned with avoiding casual manual work to preserve their ritual status, rather than increasing their market situation (i.e. income and possibility of income advancement):

- Sunni (30, Moria) "Choti Jati" (inferior jati) earns well these days because they can can do any kind of work therefore, they get the work easily whereas "Badi Jati" (superior jati) don't get it easily.
- Me That means that "Choti Jati" are earning better than "Badi Jati"? How does that affect the "Badi Jati" community?
- Sunni (30, Moria) "Badi jati" are lagging behind. This is the effect. If the "Choti Jati" earn Rupees 10 and "Badi jati" earn Rupees 1. The one earning Rupees 1 lags behind, no matter how much land he owns. The one earning Rupees 10 is ahead by Rupeess 9, isn't it? That is why

the "Choti Jati" is moving forward at greater pace. (...) The thing is that Thakurs don't want to take up Chota Kaam (inferior occupation) ... Jobs of Badnami (shame).

Me If they can't do it in villages, can't they do it in towns?

Sunni (30, Moria) They can but there is always the possibility of receiving some visits by the relatives or villagers, so that may spread the news in the village, which will defame their status.

The ritual status is reproduced with the sharp distinction between salariat employment and casual work. Salariat employment involve some cognitive or technical skills and relies less on physical efforts. Indeed, the narratives collected highlight the fact that the factory jobs are considered more prestigious than say brick making because the former involves a collaboration of the body with the machines, while the latter only involves the body as the mean of production and it is more physically demanding. Salariat employment is associated with higher social prestige, irrespective of the economic reward, while physical work downgrade the status.

Ramesh (51, Thakur) Mazdoori' wage (casual manual work) is relatively higher than some Naukri (regular employment).

Me So why don't you work in it?

Ramesh (51, Thakur) Because Thakur must earn out of their ideas not their body. You come with me to Moradabad, and I will show you how I manage to earn Rs 250 by applying my ideas? (...) We have a computer in our minds, we compute and calculate things. Suppose I would go and stand where the mazdoori (casual workers) stand to find work (labour mandi). I won't work but will take a tike (contract). So, suppose someone comes to me and gives me the work to do in Rs 1000. I will take that work and I would hire two workers. They will work whereas I will just sit and supervise to complete the work by them. See I did not work but I earned money ...this is the computing I talked about. That is why Thakur are forward.

Ramesh emphasized that Thakurs still have a higher social status than others. However, the perception that members of the lower *jati* have of Thakurs depicts a different reality of status downgrade and *declassement*.

Me Thakurs say that making bricks is a 'Chota kaam' (inferior work) and only Jatavs go there to work. Why Thakurs do not go to brick-kiln too?

- Bablu (24, Jatav) Why don't they go, why don't they go... (sarcastic tone) They do go! Ask them to tell the same thing in front of me then I will tell them. They go to work to Moradabad, Chandausi at a salary of Rs 5000 only. They work in the shops, small shops they work there. They work for a month and get Rs 5000, nothing more.(...) In brick-kiln we earn Rs 300 every day, and I earn a total of Rs 9000 a month. And if the income of we both brothers are collectively calculated, then we make Rs 18000 in a month.
- Me So, in that way you are above Thakurs because you work hard and earn more than Thakurs, so why Thakur are still considered superiors? They earn Rs 5000 and yet they think they are higher in the status.
- Bablu (24, Jatav) Thakurs are in their own realm I told you that they boast of their ego. We are not hesitant of working hard or working in anything. We are even comfortable to earn even Rs 200 if needed, the value of 200 is nothing but still we earn.

In contrast with Thakur, we found among the other *jati* a common rhetoric of hard work being a reason for pride and a mean to gain the respect from the others.

Nanne (40, Teli) Some Thakur are careless, and they spend most of their time in playing cards. It doesn't matter to them whether the train runs or not, they would keep playing cards whole day. Jatavs are mostly working in bhatta, Moria are full time farmers, always working hard in their fields. All other people are working, some people work in Chandausi in marble polishing work and they make it via train, but Thakurs think that working in manual jobs is a badnami (shame) and it does not fit their status. I also did a lot of manual work, but so many people now come to my house to visit us, my children offer them tea. Some of these people are officers. We all keep clean. These Thakur smell bad because they don't even take bath every day, their cloths are not clean and yet they call themselves Thakur (in a sarcastic tone). In order to wash the cloths, you need money and for money you need to work.

Indeed, Thakurs are seen by the members of other *jati* as *beekar* (lazy and useless persons). They are reputed for having bad habits and selling their properties because of gambling and drinking and still working less.

Ramjit (37, Other) The thing is, they were Zamindar (landlords under the feudal regime before the Land Reforms of the 1959s) earlier, now they have no land and they can't be Zamindari anymore. They are into ill habits liquor consumption, gambling and prostitution...

Me Are they also involved in prostitution?

Ramjit (37, Other) Hmmm... (hesitation) not at present but sometime back they used to... Now they have no property left. If they don't work then where would they manage to meet their basic needs!

We also found evidence in the narratives of Thakur themselves of their community having squandered their fortune in drinking habits:

Chandaram (32, Thakur) Earlier 95 percent of Thakur used to consume liquor. Especially the earlier generation. The lavish and extravagant life was their part of lifestyle. They were lecherous because they had a lot of land but due to that lifestyle, all their land is gone.

However, there is a collective denial among Thakurs about the weakening of their social status in the village. They reinforce their perception of status superiority cultivating an acute and growing sense of rivalry with lower *jatis*. When we stressed Chaman Kumar about the reasons for Thakurs to lose their status, he first blames Jatavs for having perverted Thakurs:

Chaman Kumar (40, Thakur) the reason to that is because if a 'Chamarin' (women from low caste with negative connotation) can lure or seduce someone from Thakur then it causes problems in their house...

Then, he blamed the inclusive policies of the government and the reservation quotas for having helped the lower *jatis* to improve their social position and hampered the higher *jatis*. Finally, he admitted that Thakurs' social position is downgraded in the name of the *Izzat* (the honour). Thakurs are undergoing a social *declassement* because of their collective compliance to preserve their social status as superior *jati*. The notion of social status, previously associated with the purity order, translates into a scale of prestige associated with non-farm occupations.

Chaman Kumar (40, Thakur) The reason is that, Thakurs get less wage and Thakurs can't work in activities of the kind that 'Choti Jati' (inferior jati) can do consequently, the means of livelihood available to Thakurs are less.

Me But why can't Thakur work in the same work, work is work , so they can work as well?

Chaman Kumar (40, Thakur) But everyone also takes care of their 'Izzat' (honour). We have to protect our status as well. We have to sustain living but also 'Izzat' (honour) should not be compromised.

Thakurs are most concerned with the preservation of their social status, by reproducing ritual norms residual from the agrarian society than to experience social mobility.

Yunus, a *mistri* (master) reputed for his skills of carpentering, explained to us that the *mazdoor* (casual manual work) from the *jati* of Thakur would never accept to get trained by a *mistri* from a lower *jati*:

Me If a Thakur is working at a wage of Rs 200 as mazdoor whereas you are earning Rs 400 as mistri, why he could not approach you to learn the skills so that he can also earn the same wage as you do?

Yunus (28, Other) Yes, he could approach me but they (Thakur) have this feeling "How can I work under him, he's a mistri and I can't work as beldari (helper) under him". They are all unskilled due to this feeling.

Me But would you accept to teach them the skills?

Yunus (28, Other) Yes, I can teach them.

Me Did they ever approach you?"

Yunus (28, Other) No, that is why they have not learnt it (...) because they think they are superior.

However, Thakur's are not considered by the others to have preserved their social status and their *declassement* is visible to all the community.

Me Don't you feel bad of working in someone else's land, doesn't that hamper the 'Izzat' (honour)?

Surendra (23, Moria) No, nothing like that.

Me But many Thakurs say that they do not go to work in other people's field because their would lose the Izzat (honour)...

Surendra (23, Moria) Alright! (sarcastic tone) If that is the case then why do they go to work in Samata Mill (one of the yards in Chandausi where porters from Palanpur go to work), won't it degrade their status? If they are Thakurs then why do they need to work under anyone, it also degrades their status! If that rule was respected, they should stay at home. Earlier the Thakurs were the richest, they possessed the largest share of land but why did they become poor, because they spent money lavishly in drinking and extravagant marriages. So, they should not give

that reason that the Izzat is loss if they work under someone. There are much other communities who has progressed over time by working anywhere. Say Muslims, they have flourished because they can work in anything. Their relatives and all the family members work but on the contrary, the Hindu rules deteriorate their wealth (of Thakurs). They do not go to work in whatever they get because they have a regressive though about certain work, they keep aloof from certain work because the fellow people would make mockery on them. Muslims do not have that attitude; they support their community in whatever work a fellow chooses to work with. They appreciate whatever they find to work and that way the entire community grows.

Me Why do the Thakur have such attitude?

Surendra (23, Moria) I have no idea why; they have this sort of attitude right from the beginning. This is the trend for generations in their community. No one in the community of Moria thinks that way, they are all open to work anywhere, and women can go out too. No one have this attitude that work will degrade the status. I do work as mazdoor, as well in cultivation and many other works, work is not degrading, work make my status grows.

Me So why Thakur have such belief and not the Moria? Moria are not concerned about their prestige and status?

Surendra (23, Moria) Moria can work anywhere, they work under the Thakurs too but Thakurs won't work under Moria, because this is what their tradition is, they have maintained that status from the beginning, they say they are 'bade' (superior) in status. But they are actually below others, if they work under someone in the mill as pallidari (porter) then they are below someone right! Here in the village they fake themselves, they retain their past status.

Surendra argues that Moria are not concerned with their social status, however we also found evidence of the contrary. Several Moria respondents placed themselves above Thakurs when we asked them to list the *jatis* in Palanpur in a hierarchical order. The *jati* of Moria has benefited from opportunities of social mobility from agricultural labourers and middle farmers to large farmers after the land reforms and during the Green Revolution. They became the largest landowners in the village which placed them above Thakurs. Therefore, many perceived themselves as similar to Thakurs in terms of social status.

Me But there are Moria and Thakur families as well who have no land and

property, but they do not work in brick-kilns... why it is so?

- Anuj (23, Moria) Yes that is true even if a Moria doesn't have land then he works in something or the other. Moria and Thakur take more interest in factory and company works. They go to Haryana Punjab and Moradabad to work in factories. Some people who are not willing to go 'bahar' commute daily to go to work in Moradabad and Chandausi they manage to get a salary of Rs. 5000-6000. They do not work in bhatta.
- Me But the earning in bhatta is higher, someone working everyday can earn up to Rs 10.000 by month. The work is work and earning is better..."
- Anuj (23, Moria) Still, we don't work in bhatta. All are humans, but we cannot work in bhatta, we can work in any other profession though.

One of the main reasons for the ascent of Moria relates to *jati* ritual norms preventing Thakur women from any economic activities, including self-cultivation. Indeed, women Thakur are exclusively assigned to domestic work. The participation of the female component of the household to the economic activities is considered by higher castes as a shame. In contrast, among Moria households, all the members of the family are involved in self-cultivation, which has helped them to reduce the costs of production and to become more competitive than Thakurs who must hire agricultural labourers for cultivating their fields. We interviewed several Thakur women about their considerations related to the work restriction in their *jati*. Most of them emphasized the fact that for any reasons, a Thakur woman would never go to the fields.

Lakshmi (35, Moria) I have never seen my field, even if my household or my son is dying of thirst, I will not bring the water. This is a question of honour. I cannot dishonour my community.

When we stressed them about the reasons for such restrictions, the Hindu norms and the honour of the community was always mentioned by the respondents.

Me Who restricted women from working outside?

Roopavati (32, Thakur) Because that is the pride in Hindu religion. If a women work outside, then the pride is compromised.

Me But Moria and Jatav women work, so aren't they Hindu?

Roopavati (32, Thakur) No, they are not (...) Though they are Hindu they are 'Choti Jati' (inferior jati) so they can. In our religion, Hindu,

no women go outside to work. Our forefathers might have some reasons for setting this tradition and we keep following it.

None of the Thakurs 'women we interviewed admitted the comparative disadvantage of their *jati* compared to other *jatis* because of this restriction. The ritual norms of purity are not questioned. We found evidence of the exclusion of women from economic activities being considered an important social marker increasing the chances of marrying the next generations to families having high social status.

Me If women can't work in cultivation then it means less profit...

Roopavati (32, Thakur) What loss! there is a lot of work in the house as well. Looking after fodder, cleaning them, collecting the cow dung. Cleaning the house and washing the clothes, cooking food and cleaning utensils ... There are lots of works, we have no time for other works!

Me But if the women and men of the family both work then there...

Roopavati (32, Thakur) (interrupting abruptly) That is done only among 'Choti Jati' families, not in Thakur. Many people now have gone out to work but it doesn't suit us to go and work in someone's field. People make fun of us, they make remarks such as "look at those Thakur women, what kind of women she is, she is working" (...) Moreover we have a lot of work at home. Outside work is done my men, if they need more labourers then they can hire laborers.

The selected interview's excerpts discussed in this section suggest that Thakurs would be undergoing a process of declassement consequent the agrarian crisis and the scarcity of high salariat opportunities. Conversely, with the transition from farm to non-farm occupation, Jatav seem to benefit from higher wages in brick-kilns works and other manual works compared to previous agricultural labour. As a result, Thakurs exacerbate their superiority compared to lower jatis by opposing the social status to the market situation and reproducing a caste hierarchy based on different level of prestige associated with different occupations. They stigmatise brick-kiln work performed by Jatavs as an impure occupation. In contrast, non-manual occupations are considered as more prestigious. Despite the economic necessity, Thakurs are more concerned with preserving their social status, by reproducing the ritual norms of social distancing, rather than increasing their chances of economic advancement. However, the social status, based on the ritual order, seems to have lost its significance in the perception of the other *jatis*, who are more concerned with social mobility. In contrast with Thakurs',

Moria and Jatav seem to benefit from an economic advancement with manual works. A new rhetoric of hard-work improving the social status emerge among Jatavs, whose economic advancement, emancipate themselves from the ritual hierarchy. Some of the Thakurs we interviewed look at the economic ascent of Jatavs with fear for the future:

Sunil (45, Thakur) They are mehnati (hard worker) people. They earn more than us, they work hard, earlier they had nothing, now they do mehnat (hard physical work), they earn more, they have built houses and shops, earlier they had nothing under their name. Whichever jati, if you do not work, what will you earn? Thakurs had lots of lands, they have wasted everything, drinking, eating. Only those who have done mehnat they are doing well in life, and they will continue to grow.

However, the Jatavs' upgrade in terms of market situation do not necessarily imply also an upgrade of work situation and employment relations. Indeed, we show in the next section that the probability to access salariat positions is lower for the low *jatis* than for others. We have seen in the previous chapter that the probability of accessing higher classes is significantly determined by higher education attainment and financial backup. Jatavs and Telis have a lower education level than Thakurs and thus, they still have a disadvantage.

In the second part of the chapter, we use surveys data to measure the strength of association between *jati* and class. We look at the class segregation by *jati*, the class distribution by *jati* and the association between *jati* and class for each class across time. We eventually ask whether there has been a decline in the strength of association, implying greater social mobility within the *jati*

6.4 The jati-class association over time

Generally, segregation has been considered for the dichotomous classification of individuals (Duncan and Duncan, 1955). In the case of *jati*, we need to study segregation in a multigroup context (several indexes recently proposed in the literature: Silber, 1992; Reardon and Firebaugh, 2002; Frankel and Volij, 2007, Alonso Villar and Del Rio, 2010). The multigroup index of dissimilarity indicates the level of occupational homogeneity in each *jati* group.

The overall class segregation by *jati* in Palanpur over time is shown in Figure 6.1. Three different indices of overall segregation are reported in the graph: IP (index of dissimilarity computing the uneven distribution of groups of the population), Gini (a measure of the area between Lorenz curve and

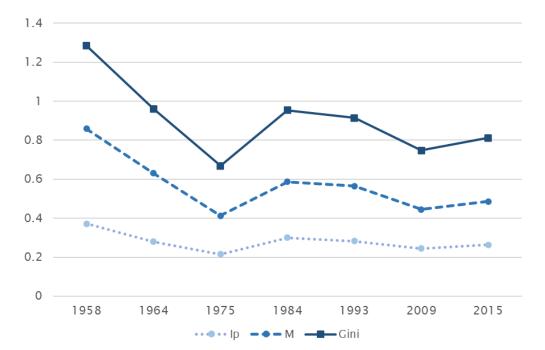


Figure 6.1: Indexes of overall class segregation by caste

Notes. IP = Multigroup index of dissimilarity; M = Mutual Information Index M (natural logs)

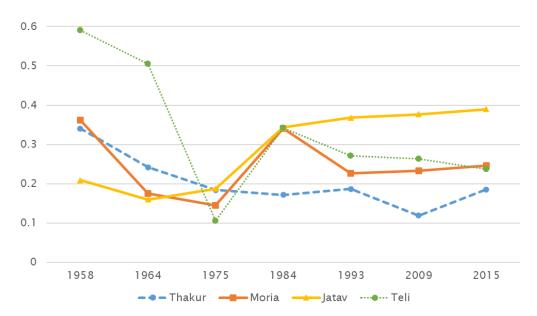
the line of perfect equality normalized by the total area under the 45-degree line), M (mutual information index corresponding to the weighted average of local segregation indices).

The three indices show a decline from 1958 to 1975, with the first phase of economic diversification. The reduction of class segregation by *jati* means that the class distribution by *jati* has become more heterogeneous and hence, the caste-class association has weakened. From 1975 to 1984 there has been a small regain of the overall segregation indicating that some castes were concentrated in some of the new occupations. After 1984, there has been again an overall decline of the overall segregation.

The multigroup index of dissimilarity IP in Figure 6.2 displays the level of class segregation by *jati*. The zero level indicates a situation of perfect heterogeneity (all the *jati* are equally distributed across the classes), the more the index increases, the stronger is the concentration of that *jati* into a single occupation. In other words, the local measures of class segregation (IP) show the percentage of people who would have to change their class to make the distribution even (*jati* equally distributed into the classes).

The segregation increased in the case of Jatav: in 2015, almost 40% of

Figure 6.2: Local measures of class segregation by caste over time (IP = multigroup index of dissimilarity)



Jatavs must be in another class to make the class equally distributed within the jati. The class distribution by jati displayed in Table 6.1 show that 67% of Jatav in the third cohort were in the class of manual workers. The local segregation in case of Thakur has slightly decreased, with a greater heterogeneity of caste in the third cohort: Thakurs were mainly large farmers and middle farmer in the first cohort, while in the second and third cohort they also moved to middle farmers, low salariat and self-employed. We also find Thakurs into high salariat and manual workers. Moria remained mostly concentrated in large farmers and middle farmers. Teli were highly concentrated in agricultural labourers in the first cohort, in the second cohort they moved to middle farmers and low salariat, while in the third cohort more than 46% of them were self-employed. The example of Nanne described in the last section of the previous chapter illustrates the exemplary case of social mobility due to the acquisition of skills. The spread of self-employment within the community of Teli is a consequence of Nanne having trained several people from his jati to the mechanics of motorbikes. The sector of motorbike repairing has become larger in size, involving more than 10 individuals from the jati of Teli in 2015. This example shows the positive externalities of the vocational training for creating opportunities of upward mobility not only at the individual level, but also at the collective level. However, the skills of motorbike

Table 6.1: Class distribution by caste by birth cohorts (column percentage)

<u> </u>						
Cohort 1	Jati					
Origins	Thakur	Moria	Jatav	Teli	Other	Total
Large farmers	63.6	69.1	37.9	9.1	20.0	41.0
High salariat	3.6	1.8	0.0	0.0	5.3	3.1
Middle farmers	23.6	23.6	44.8	50.0	34.7	32.4
Low salariat	1.8	0.0	0.0	0.0	16.8	6.6
Self-employed	5.5	3.6	0.0	0.0	14.7	7.4
Agricultural labourer	1.8	1.8	17.2	40.9	8.4	9.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cohort 2	Jati					
Origins	Thakur	Moria	Jatav	Teli	Other	Total
Large farmers	25.5	44.2	3.9	0.0	7.1	19.1
High salariat	6.4	1.9	0.0	0.0	4.3	3.3
Middle farmers	17.0	32.7	46.2	55.0	24.3	30.2
Low salariat	27.7	7.7	11.5	20.0	30.0	20.9
Self-employed	6.4	5.8	7.7	5.0	11.4	7.9
Agricultural labourer	6.4	5.8	15.4	10.0	8.6	8.4
Manual workers	10.6	1.9	15.4	10.0	14.3	10.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Cohort 3	Jati					
Origins	Thakur	Moria	Jatav	Teli	Other	Total
Large farmers	6.9	27.4	0.0	0.0	3.1	8.8
High salariat	8.3	0.0	2.3	3.1	4.6	4.0
Middle farmers	27.8	32.3	18.6	6.3	27.7	24.8
Low salariat	12.5	3.2	4.7	9.4	10.8	8.4
Self-employed	23.6	11.3	0.0	46.9	20.0	19.0
Agricultural labourer	1.4	3.2	7.0	15.6	6.2	5.5
Manual workers	19.4	22.6	67.4	18.8	27.7	29.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

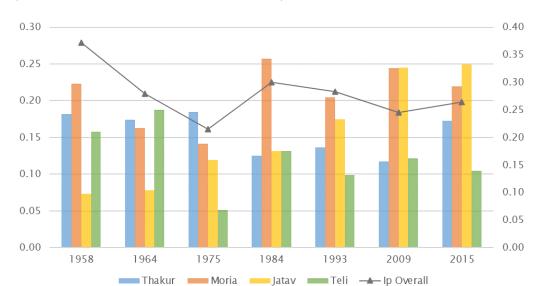


Figure 6.3: Relative contribution to overall segragation by caste over time (IP = multigroup index of dissimilarity)

repairing have remained exclusively concentrated in the *jati* of Teli. Informal training involves a subordinate relationship of the apprentice to the master. Although, we have not found any particular tension between Muslims and Hindus in the village, the social distancing between the two communities is higher than between Hindus *jatis* or different rank. Therefore, Hindus would consider humiliating to learned from a Muslims master.

The relative contribution of each *jati* to overall segregation over time, displayed in Figure 6.3 shows that Moria's and Jatav's contribution has increased from 1984 onwards, which means that Jatavs and Moria have more probabilities of being in some specific class than others.

Indeed, almost 60% of Moria are distributed among large farmers and middle farmers in the third cohort, and 67% of Jatav are manual workers. In the decades previous to 1984 segregation was on average higher, in fact cultivation was the primary occupation for the large majority. In the 1970s with the opening of manufactories in the surrounding areas, many people from different *jati* have started to work as regular employees in some factories, but later with the closure of some of these factories, the migration out of those who found a regular employment outside Palanpur and the general decrease of opportunities for employment salariat, the overall level of segregation has increased again before stagnating until the last survey. In 2015, the overall level of segregation was something above 25% with Jatav and Moria being

the most segregated *jati*. The overall level of segregation has decreased of more than 10 points of percentage during the surveyed period.

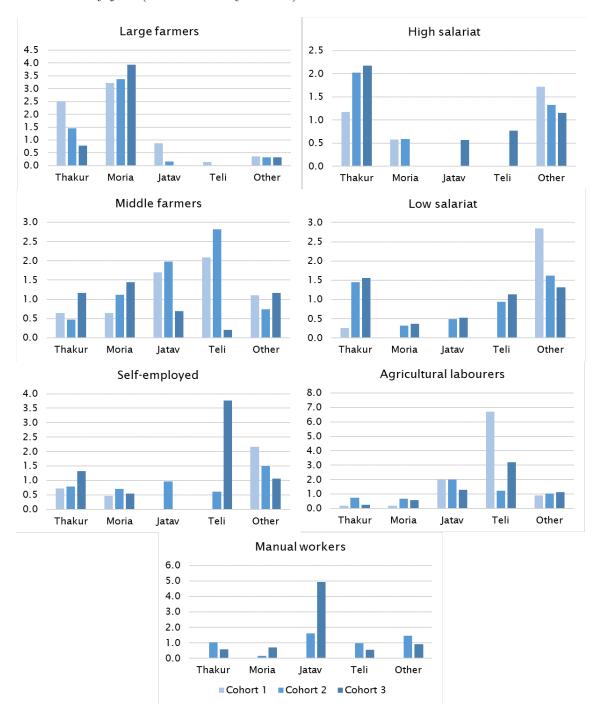
Table 6.2 shows the caste distribution by class. We can see that the class of large farmers became increasingly populated by Moria. In the third cohort, there are no Jatav and neither Teli among large farmers. High salariat became increasingly populated by Thakur: in 2015 half of the individuals in the class high salariat are Thakur. Also, the proportion of Thakur among middle farmers increased over time but decreased among large farmers. The proportion of Jatav and Teli among high salariat also increased in the third cohort. Before, there was not a single case. Agricultural labourers remained mostly Teli. Indeed, in the second cohort, the proportion of Thakur and Moria as agricultural labourers increased but then decreased in the third cohort. The class of low salariat was mainly populated by Thakur in the second and third cohort, while self-employed are mainly from the jati of Thakur and Teli. Finally, manual workers are quite heterogeneous in terms of jati composition. However, in the third cohort there is a majority of Jatav in the class of manual workers. If the caste distribution by class and vice versa the class distribution by caste illustrate the changes over time of the occupational structure across and among each jati, it does not tells about the strength of association of each jati with each class. In order to estimate the strength of association over time, we calculate the probability of each jati to be in a class rather than not being in that class compared to the probability of the average individual to be in that class rather than not to be in that class (Figure 6.4). The probability of the average individual corresponds to the probability of the whole population. We measure these probabilities for each class of destination using the odds ratio: the ratio between the odds of a particular jati and the odds of the average individual. This would answer the question of how much each jati is more likely to be in each class compared to the average individual, in other words it tells about the advantage and disadvantage of each jati on the probability to be in a specific class class destination.

The odds ratios are calculated for the three cohorts of birth so that we can provide evidence of the persistence, increase or weakening of the strength of the association between *jati* and class, for each class. While the advantage of Thakur on the probability to be in the class of large farmers have increased over time, reaching the same level of probability than Jatav from the first cohort had, they show an increasing advantage for high salariat positions in particular in the second and third cohorts. Overall, Thakur's probabilities to be in a class rather than to be in all other classes are moderate but increased over time in several classes: middle farmers, low salariat and self-employed. Moria, show a strong and increasing advantage for large farmers and middle

Table 6.2: Class distribution by class by birth cohorts row percentage)

Cohort 1	Jati						
Origins	Thakur	Moria	Jatav	Teli	Other	Total	
Large farmers	33.3	36.2	10.5	1.9	18.1	100.0	
High salariat	25.0	12.5	0.0	0.0	62.5	100.0	
Middle farmers	15.7	15.7	15.7	13.3	39.8	100.0	
Low salariat	5.9	0.0	0.0	0.0	94.1	100.0	
Self-employed	15.8	10.5	0.0	0.0	73.7	100.0	
Agricultural labourer	4.2	4.2	20.8	37.5	33.3	100.0	
Total	21.5	21.5	11.3	8.6	37.1	100.0	
Cohort 2	Jati						
Origins	Thakur	Moria	Jatav	Teli	Other	Total	
Large farmers	29.3	56.1	2.4	0.0	12.2	100.0	
High salariat	42.9	14.3	0.0	0.0	42.9	100.0	
Middle farmers	12.3	26.2	18.5	16.9	26.2	100.0	
Low salariat	28.9	8.9	6.7	8.9	46.7	100.0	
Self-employed	17.7	17.7	11.8	5.9	47.1	100.0	
Agricultural labourer	16.7	16.7	22.2	11.1	33.3	100.0	
Manual workers	22.7	4.6	18.2	9.1	45.5	100.0	
Total	21.9	24.2	12.1	9.3	32.6	100.0	
Cohort 3	Jati						
Origins	Thakur	Moria	Jatav	Teli	Other	Total	
Large farmers	20.8	70.8	0.0	0.0	8.3	100.0	
High salariat	54.6	0.0	9.1	9.1	27.3	100.0	
Middle farmers	29.4	29.4	11.8	2.9	26.5	100.0	
Low salariat	39.1	8.7	8.7	13.0	30.4	100.0	
Self-employed	32.7	13.5	0.0	28.9	25.0	100.0	
Agricultural labourer	6.7	13.3	20.0	33.3	26.7	100.0	
Manual workers	17.3	17.3	35.8	7.4	22.2	100.0	
Total	26.3	22.6	15.7	11.7	23.7	100.0	

Figure 6.4: Probabilities of being in a specific class with respect to an average individual by *jati* (odds ratios by cohort)



farmers, while they have very less probabilities to be in non-agrarian classes. Indeed, the strength of association between Moria and farmers classes have increased over time while it has decreased for Thakurs. In contrast, Jatav and Teli have never had any advantage for being large farmers and their chances to be middle farmers decreased in the last cohort. The strength of association with farmers classes decreased for Teli and Jatav. However, Teli still have a higher probability to be agricultural labourers than other in the third cohort although the probability has decreased over time. In the third cohort, they show a strong probability to be self-employed instead. Finally, Jatav's probabilities to be agricultural labourers have decreased, as well as the probabilities to be middle farmers, but they became very likely to manual workers in the third cohort.

The analysis of the odds ratios over time highlight different patterns of association for each caste. The Thakurs' advantage for large farmers have decreased over time, however they are increasingly advantaged for the high salariat destination. Middle farmers have maintained a strong advantage for being large farmers and middle farmers. Teli have lost their strong initial disadvantage. They recently became more likely to be self-employed while in the first cohort they had high chances to be agricultural labourers. Finally, Jatav, have lost their advantage for middle farmers and have become more likely to be manual workers than others. However, we also found a little but recent advantage for high salariat's class, which implies that opportunities of upward mobility have opened up to Jatavs despite their initial disadvantage.

6.5 Jati and upward mobility

In the last section of this chapter, we estimate the marginal effects of the *jati* on the probability of experiencing upward mobility. The question we ask is whether the probability of upward mobility for the *jati* at the bottom are fewer than upper *jati* groups irrespective of the social origins. Moreover, we look specifically at whether the disadvantage of those at the bottom, jatav and teli, decreases or persists over time on the probability to move up than members of other *jati* from the same low class origins.

We run a multinomial logistic model where the dependent variable is the class of destination and the independent variables are the class of origins and the *jati*. In order to answer our research question, we control for their interaction. We also control for other individual and household characteristics and for time effects.

```
y_i = class_f + jati_i + class_f \times jati_i 
+ cohort_i + cohort_i \times age + X_i + Z_{hh} + \epsilon_i  (6.1)
```

where:

 y_i = probability of an individual to be in a destination class $class_f$ = class of origin $jati_i$ = jati $cohort_i$ = cohort of birth

 $X_i = \text{invidual characteristics}$

 Z_{hh} = household characteristics

For the class of destination and origin we use the collapsed three-class schema introduced in the previous chapter instead of the seven-class schema for two reasons. First, since we are interested in estimating the probability of upward mobility, we need to introduce a hierarchical dimension in order to capture the vertical movements only. Second, the population observed has a limited size and we do not have enough observations for estimating the interaction term between *jati* and class of origins using the disaggregated schema. Contrarily to the binomial logistic regression estimated in the previous chapter, in this model the outcome is multiple: top class, middle class and low class. The base outcome is the middle class. The independent variables are *jati* and class of origins and the interaction between the two terms.

We control the effect of the *jati* with a dummy for each *jati*, whose category of reference is the group of other *jati*. As mentioned earlier, this group is constituted or multiple *jati* groups which are too small in term of numerosity and less representative than the others.

We control for the life cycle effect with age, which is a categorical variable of three cohorts (the reference category is from 15 to 24 years old) and the period's effects with the birth cohorts (cohort 1 is the reference category). We also control for the interaction between age cohort and birth cohort to exclude variations of life cycle effects associated with the periods effects. We include additional controls at the individual and household level: education, marital status, household size and eldest son. Education is a dummy variable for secondary education or beyond. Marital status is a dummy variable for married. Eldest son is a dummy variable and household size a continuous

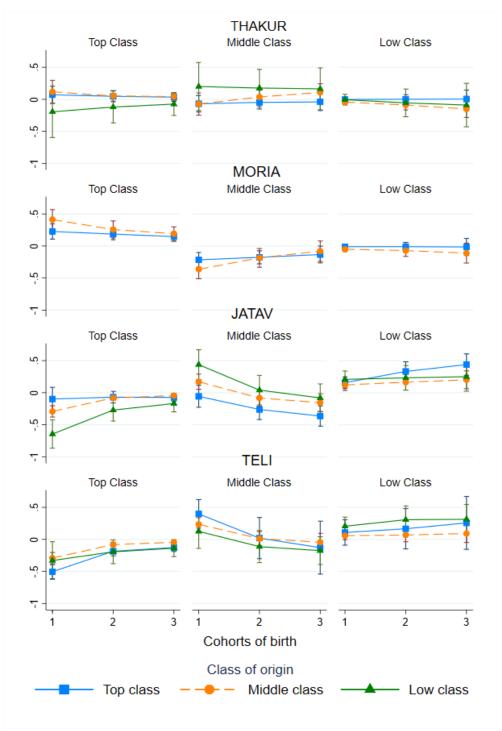
variable. Standard errors are clustered at the household level in all the models. The full outcome is reported in Table A.4 (Appendix).

Figure 6.5 displays the average marginal effect (AME) of each jati on the probability to access a specific destination class given the class of origin, keeping all other variables constant (full estimates are reported in Table A.5 (Appendix)). In other words, this AME indicates the difference in the probability to be in each destination class due to the jati effect with respect to an individual belonging to reference jati ("Other", i.e. the base outcome) having the same individual and household's characteristics (i.e. ceteris paribus). Indeed, rather than the jati effect irrespective of the social origins, here we intend to focus on the relevant interaction effects between origins and jati, which account for a more comprehensive estimate of the social background's influence, both of jati and class, on the chances of upward mobility.

For Jatav, the *jati* effect on the probabilities of being upwardly mobile toward middle and top class destinations decreased over time and narrowed down the difference of probabilities with the category Other (Figure 6.5, 3rd row). In particular, the incidence of *jati* vanishes on the probability to move upwardly from low to top class in the third cohort (the difference with respect to reference category dramatically shrinks from -64% to -17%, being the latter not statistically different from zero). Moreover, the disadvantage from middle to top class decreased from 29% to 5% less probabilities compared to others. The initial effect of the jati on the probability of experiencing downward mobility from top class to middle class has become negative in the second and third cohort, which means that the probability of falling in the middle class slightly decreased for the Jatavs having origins in top class. Compared to the probabilities of the category Other, the *jati* of Thakur has maintained a significant advantage for immobility. The jati has a negative and significant effect on the probability of experiencing downward mobility from middle to low class over the three cohorts. Moria keep a jati advantage over time for upward mobility and immobility in top class, even though the effect on the probability of middle farmers to move upwardly have slightly decreased in the second and third cohort. Moreover, they have a persistent advantage against downward mobility over the three cohorts. Finally, the jati has a persistent and positive effect on the probability of Teli to remain low class and a persistent effect on the probability of downward mobility for those having origins in top class and middle class. Globally, the jati effect has slightly decreased and the probability of social mobility for each *jati* tend to equalize the probabilities of the reference category.

Still keeping in mind the sensitivity of the econometric analysis to such a small sample of observations, however we found significant evidence of the *jati* disadvantage of those who stand at the bottom of the class hierarchy

Figure 6.5: Average marginal effects of jati per class of origin on class destination by cohort (multinomial logit model)



Notes. Graphs: scatter of the probabilities of being in a specific class. Y-axis: probabilities; X-axis: Cohorts of birth. Combined picture (4×3) : rows: jatis; columns: classes of destination. *Example*. Consider the graph in the 3rd row and 1st column: the green triangle on the bottom-left says that the probability of being in the top class for a Jatav coming from the low class, and whose cohort of birth is equal to 1, is more than 50% less than the corresponding probability of someone with the same characteristics but belonging to "Other" *jati*, *ceteris paribus*.

to have weakened over time and the chances of Jatavs for upward mobility having increased, which gives some hope for the future.

Me Why Jatavs are poor mostly?

Mahender (44, Jatav) Everyone has tiny pieces of land and they keep dividing them across the generations. Now they have less than a bigha per share. Nor they can promote their children to pursue education neither they can send them to some mistri (master) to learn the skills, so they are poor. They are poor for generations because right from the beginning they owned less land. As the land has been divided it further shrunk.

Mahender's wife (37, Jatav) What a family can do with one bigha of land? Families don't even have land left to expand their houses, the size of family is expanding but the land is not. Poor families can't even send their children to school. If they study, then where would they earn. Those who are in service and employed would better take care of their coming generation.

Mahender (44, Jatav) There are families who get salary up to 30-40 thousand a month, they will promote education to their next generation. But those trapped in poverty remains poor over generations.

Mahender's wife (37, Jatav) Jatavs are poor everywhere. If someone breaks the trap, then they can be better off. But that is difficult.

"Difficult but not impossible" we could have answered to Mahender's wife.

6.6 Conclusion

In this last chapter, we analysed the association between the *jati* and the class over time and the influence of the interaction between the two on the probabilities of experiencing upward mobility.

The qualitative analysis of the interviews shows that the caste division of labour previously based on a perfect congruence of wealth and social status has been reproduced, to some extent, despite the emergence of new occupations, by exacerbating the divide between salariat employment and casual work. Thakurs, at the top of the caste hierarchy, reinforces the opposition between the prestige and the market situation (i.e. income level, income security and possibility of economic advancement) by stigmatizing the brick-kilns work performed by Jatavs as an impure occupation. Despite, their greater involvement in casual manual work, motivated by economic necessity, the caste

rivalry have been reproduced in the labour market. Thakurs claim their superior mental abilities and their better predisposition for salariat positions, and are more concerned with preserving their social status, by reproducing ritual norms, than increasing their market situation.

High salariat opportunities are scarce and cultivation has been hoarded by Moria, who became the largest farmers in the village. As a consequence, Thakur are increasingly exposed to an effective risk of *declassement*. We found evidence from the narratives of the villagers of Thakurs being heavily involved in extravagant habits, like gambling and drinking, which in turn have also contribute deteriorate the perception that others have of their social status. Moria instead, have experienced upward mobility due to a substantial involvement of all the members of the households in self-cultivation in contrast of Thakurs who still prevent women from taking up economic activities. This paradox shows that the reproduction of the ritual norms among Thakurs has hampered their opportunities of economic advancement.

At the village level, the changes in the caste relations partly correspond to a weakening of the *jati*-class association over time. We found that the overall class segregation by *jati* decreased over time. However, at the *jati* level, the association increased for Jatav who have a strong and increasing probability to be manual workers compared to the average individual. Moria also have higher probabilities to be middle farmers. Teli's probabilities to be self-employed increased due to a virtuous process of skills diffusion within their *jati*. In contrast, Thakurs' probability to be large farmers decreased, however they have more probabilities than the average individual to be high salariat. The wealth advantages cumulated in the agrarian society allowed them to invest in child education and access to higher positions more than the others.

The analysis of the interaction effect of jati and class of origins on the probability of disadvantaged jati of experiencing upward mobility shows significant and interesting results. Despite a persistent disadvantage of Teli and Jatav for accessing higher positions, irrespective of their social origins, we found that the initial strong disadvantage of Jatav from low origins to experience upward mobility, compared to other jati with similar origins, decreased significantly in the second cohort and in the third cohort. The effect of the jati on the probability of moving from low to middle and top class almost equalized with the effect of the other jati in the case of Jatav. In contrast, the jati disadvantage for Teli continue to be consistent over time, reducing their probability of experiencing upward mobility, irrespective of their social origins.

Conclusion

This thesis inquiries the reconfiguration of the social structures of inequality and investigates the trends, the patterns and the determinants of social mobility among the population of Palanpur, a north Indian village, over 1958-2015. The period covered by the case study has been of fundamental changes for the rural society in India reflected on the socio-economic transformation in Palanpur. With the abolition of the Zamindari system after the Independence of India, the rural society shifted from a semi-feudal regime to an agrarian economy. With the land reforms of the 1950s, the tenants who previously tilled the land for their landlords were entitled with property rights and new classes of farmers emerged narrowing the sharp polarisation between landlords and landless. Later, with the Green Revolution in the 1960s and 1970s, the large farmers who had enough financial capacity to invest in new technologies improved their productivity and expanded their asset. At the same time, the mechanisation of agriculture created a surplus of labourers who moved toward non-farm occupations. During the 1980s, the country witnessed widespread economic reforms and acceleration of the manufacturing sector, which corresponded in Palanpur with a spread of job opportunities in factories located around the village. However, soon after, the secondary sector begins to stagnate, and the neo-liberal policies of the 1990s, oriented to the integration of the Indian economy with the global market, contributed to the steady expansion of the tertiary sector.

From the 1990s onward, we observed in Palanpur a process of strong economic diversification with the rise of non-farm income, the increasing integration of the village economy with outside labour markets, the improving connectivity toward urban centres and the development of the surrounding small and medium towns. Previous studies on Palanpur have provided evidence of these changes playing a crucial role in shaping increasing inequalities in Palanpur. However, it was not clear whether the rise of inequalities corresponds with a redistribution of the emerging opportunities of social mobility or a further polarisation of the structures of accumulation rooted in the past agrarian society. This thesis aims precisely to unravel the link between the

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increase of new opportunities and the equality of opportunities among individuals having a different social background. First, we look at the amount of social mobility occurred during the last seven decades, which is measured by the movements of individuals or groups of individuals between different social positions within a system of social stratification. Second, we look at the relative chances of social mobility of each individual, irrespective of the social background.

In India, there are two forms of social stratification, by caste and by class, which interact but also differ in several aspects and thus require to be analysed as two separate concepts. The caste membership is an ascriptive and inherited attribute based on the principle of endogamy. Still nowadays, in India, there is less than 5% of inter-caste marriages (Mosse, 2018). The castes are hierarchically ordered on a scale of ritual status based on the broad notion of purity. The mobility inter-caste is impossible, and the internal composition of the caste remains the same with no possibility of new caste formation. Therefore, the caste must be considered as a permanent status, ordered on a ritual hierarchy, acquired by birth and immutable. The stratification by class (or social stratification), instead, is constituted by groups of individuals sharing a similar economic status (based on occupation or income levels). Contrarily to the caste, the class is highly influenced by the structural transformations, it can change in composition, size and rank of prestige, over time and across contexts. Moreover, the main difference of class from caste, is that mobility inter-class is possible at any moment of life and from a generation to the next. We define intergenerational social mobility the movements from the father's class to the son's class and intragenerational mobility the movements between classes during the life course. According to the direction of the movement, from lower class to higher, vice versa from higher to lower or between similar class, we consider that there has been an improvement of the life chances (upward social mobility), a downgrade (downward mobility) or immobility (horizontal mobility).

The study of social mobility in India is of high relevance due to the expectations of the modernisation to weaken the effect of the family resources on the son's occupational outcome and inheritance of occupations to decrease with the diversification of the economy. Indeed, in the agrarian society, the two systems of caste and class perfectly overlapped due to the caste division of labour and the perfect correspondence between wealth and status. With the emergence of caste-free occupations in the non-farm sector, we expect the association between caste and class to weaken.

Despite an emerging stream of research on intergenerational social mobility in India, the attempts to answer this question has led to controversial findings which are also limited by the scarcity of longitudinal data. Moreover,

the interaction of caste with the effects of the class of origin can be only captured with a disaggregated analysis of the *jati*, which consists in the veritable endogamous group, however, this information is not available in official data the national level. Combining the quantitative analysis of a panel containing detailed information on occupation, land, income, socio-demographic characteristics, and others, at the household and individual level, with a qualitative analysis of 102 interviews and ethnographic observations collected during six months of fieldwork in Palanpur, Himachal Pradesh, Haryana and Punjab, we develop an original and insightful analysis of the social mobility and the interaction effect of *jati* and class of origins on the probability of experiencing social mobility. For the analysis of the individual social mobility, we used a 7-class schema based on the standard EGP schema (EGP, 1979) and adapted to the idiosyncrasies of the local context.

6.7 Empirical findings and contribution

The increasing demographic pressure has decreased the size of the available cultivable land per household. The fragmentation of the land and the growing probability of the joint households to partition into nuclear family units in the last decades have accelerated the transition from an agrarian society based on large familiar economies of scale to a spread of marginal farmers multiplying their sources of livelihood to cope with the agricultural distress. In 2015, only 30% of the population derived their primary source of income from farm-related activities, where less than 5% were large farmers. The substitution of agriculture from primary to secondary occupation is associated with the spread of non-farm opportunities mostly concentrated in the informal sector of the economy.

From the agrarian economy to non-farm labour markets

While in the 1970s, opportunities of factory jobs opened up in the surrounding areas, from the early 1990s onward, the construction industry and allied activities have absorbed most of the working population in Palanpur. In 2015, more than half of the adult male working population was involved in casual manual work and self-employment. The former corresponds to informal, daily-wage based, unskilled jobs such as workers in brick-kilns, marble polisher or porters. The latter includes small businesses, like grocery shops in Palanpur, and skilled workers in the above mentioned sectors. Both these categories of occupations are characterised by the precarity of the contract and the need to step out of the village. Recent decades have seen greater

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integration between Palanpur and its neighbouring urban areas, as a result of the occupational transition, the markets interlinkages, the diversification of the networks and the increased connectivity of the village with the outside world. In particular, we found that the development of the small and medium towns around Palanpur plays an essential role in the expansion of non-farm opportunities for the villagers.

Commuting versus migrating and the spread of casual labour

Using survey data on migration and migrants' narratives, we found that the spread of casual labour, defined as unskilled daily-wage work, was linked to emerging patterns of spatial mobility (Chapter 3). Although migrants would be more likely to find regular forms of employment as factory workers or agricultural labourers, flows of short-term migration and commuting prevailed over long-term migration. Commuting, defined as a movement out of the village for a duration up to three months without implying any change of residence and for reasons of work, became the main pattern of spatial mobility for work. This finding is consistent with other case studies in India and has important implications for the migration studies. Indeed, the official statistics in India use a definition of migration which does not capture these patterns of cyclical and short-term spatial mobility and thus they are thought to depict a figure of surprisingly low rates of internal migration which stands very far from reality.

We found that marginal farmers are increasingly exposed to the tradeoff between leasing out the little land they own and migrate out in search
of some regular employment or staying in Palanpur and alternate part-time
cultivation to casual manual work in nearby towns. The land is barely enough
to suffice as a source livelihood and self-cultivation is mostly destined to
ensure the food security of the households. While in the past agrarian society,
the land was an economic resource as well a social marker of domination and
power, with the transition to the modern economy, the land has become a
backup for the periods of unemployment. Leasing out the land on contracts
of sharecropping or hiring labourers has a cost that only few can sustain.
For this reason, most prefer to commute and perform casual works beside
self-cultivation rather than migrating out.

However, this rationale does not apply to all equally. Migration has the advantage that all members of the household can work, even women and child. In the village, there is still a strong taboo concerning the participation of women to economic activities. Indeed, higher castes prevent women from working to preserve their social status. Among lower caste, the women's involvement in economic activities has increased but mostly in agricultural

labourers. In the labour mandi in Chandausi (the physical point of encounter between contractors and casual workers at the outskirt of the city) we haven't seen any women seeking for casual work.

In contrast, among the groups of migrants we visited in Punjab, Haryana and Himachal Pradesh, all the women were involved in economic activities, as brick makers, masons, maids and factory workers. Another advantage of migration over commuting is that salary is higher, and the chances of saving are higher because of the possibility to do overtime at work without the constraint of catching the last train to come back to the village. The main reasons that push individuals to migrate are financial distress due to heavy debts for marriage's expenditures.

The emergence of new classes and barriers to social mobility

The core contribution of this thesis is the analysis of the trends and patterns of intergenerational mobility (Chapter 5), the caste-association over time and its influence on the probability of disadvantaged groups to experience upward mobility (Chapter 6). We found that downward mobility accounts for more than half of the total class movements happened over the whole surveyed period, reflecting the lack of opportunities for upward mobility in rural areas. When comparing absolute mobility rates in Palanpur with the existing research at the national scale, the rural-urban divide appears as very striking. Indeed, the national figures display a higher surplus of upward over downward mobility, though the surplus is not as large in India as in the developed countries. Moreover, contrarily to what has been observed in industrialised countries, the room at the top of the social hierarchy has decreased in size rather than increasing with the processes of modernisation.

Although the population in Palanpur could be downwardly biased by selection attrition due to migration (those who migrated before 1993 were more likely to have better regular employment than those left behind in the village), we found quantitative and qualitative evidence of downward mobility from top to the middle and low class being the main pattern of social mobility. Upward mobility from low classes (i.e. agricultural labourers and manual workers) toward self-employed is limited due to the absence of formal vocational training for professions like marble polishers, masons, mechanics etc. and the need for financial backup to pay advances to the workers. We found some examples of agricultural labourers and manual workers succeeded in developing their activities, acquiring skills and upgrading their social positions, but these cases are rare. The personal attitude and the capacity of learning, which are subjective characteristics, can make the difference. Most of the skilled artisans in Palanpur who get direct contracts from the contractors

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and hire workers have shown an exemplary entrepreneurial attitude.

Upward mobility to low salariat opportunities is limited by the scarcity of opportunities, while the educational attainment significantly determines upward mobility toward high salariat. Secondary education increases the probability to achieve the top class, irrespective of the social background. In this sense, we found that education plays an equalising role. However, education attainment is not insensitive to economic inequalities. Indeed, the poor quality of public education increased the demand for private schools among wealthy households. While we have observed a weak but constant improvement of the education level of the villagers, there are concerns of the spread of private education, contributing to widening the inequality of chances to access high salariat positions. Moreover, access to service jobs is often subjected to the payment of bribes, discouraging the parents from investing in the education of their children, which implies high expenditures and loss of labour-power within the household.

The social origins continue to shape the structures of social advantage and disadvantage

The study of the relative mobility (Chapter 5) shows that the social mobility irrespective of the structural changes in the class distribution (i.e. the social fluidity, equality of opportunities), increased for all but at a different pace. The chances of experiencing different patterns of mobility vary with the classes of origins. Globally, the probabilities of immobility are higher at the two extreme poles of the hierarchy and mobility is higher among the middle classes. At the top of the class hierarchy, large farmers have been increasingly exposed to the risk of downward mobility toward middle classes. However, they still have a relative advantage over the others to remain immobile. The chances of the high salariat's members to stay immobile rather than experiencing downward mobility have increased over time. At the bottom, sons of manual workers and agricultural labourers have a strong disadvantage compared to others of experiencing upward mobility. We found that other individual and household characteristics partly mediate the influence of the origins on the probability of experiencing mobility, and, in particular, the jati membership.

Upward mobility of low jati and reconfiguration of the social hierarchy

The analysis of the association between the *jati* and the class (Chapter 6) shows a persisting and sharp division between the notions of superior *jati*

versus inferior *jati* which translate into an exacerbate distinction between salariat jobs, which are considered prestigious, and manual works, which are considered denigrating. This distinction resonates with the later emphasis that Goldthorpe gives to the importance of the labour contracts and the employment conditions in the definition of classes (2000), which is reinforced, in the local context, by the distinction between manual works, considered impure and technical or cognitive works, considered pure.

Thakurs, who stand at the top of the ritual hierarchy, are mainly concerned with preserving their social status by restricting themselves from casual manual work and reproducing ritual norms such as preventing women from taking part to economic activities, at the risk of decreasing their revenues. Indeed, we found evidence of casual workers' earning being higher than low salariat's wages. To preserve their social status, Thakurs negatively stigmatise the brick-kilns work performed by the Jatavs, who stand at the bottom of the ritual hierarchy, and claim their superior mental abilities and their better predisposition for salariat positions. However, high salariat opportunities are scarce, and cultivation has been hoarded by Moria (traditional jati of farmers), who became the largest farmers in the village; therefore, Thakur are increasingly exposed to the risk of declassement and pauperisation. Moreover, the efforts deployed by Thakurs to confirm their higher position in terms of social status seem to be vain. Their economic downgrade has also affected the consideration that others have of them: they are reputed for squandering their fortunes and dedicating themselves to habits such as gambling and drinking.

At the opposite, Jatavs have benefited from a sharp fall in poverty consequent to the expansion of non-farm manual work opportunities. Jatavs do not have issues of social status downgrade, because, in terms of ritual hierarchy, they have always been placed at the bottom. Therefore, they substituted agricultural labour and small farming with casual physically demanding works which are comparatively more rewarding than most of the other non-farm opportunities which do not require specific qualifications. Despite a relative persistent disadvantage to access higher positions, because of education and economic barriers, they improved their standard of livings and the perception they have of their social status.

The slogan painted on the front-door of a private school located in Sirsi, owned by Omar Prakash, a successful Thakur businessman, says: "If wealth is lost, nothing is lost. If health is lost, something is lost. And if the character is lost, everything is lost". The in-depth qualitative analysis helps us to understand that the word "character" means in this sentence "honour" and "pride" and refers to the social status identified with the dominant caste. Omar Prakash also owns a brick-kiln where many Jatavs from Palanpur use

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to work. One day that we visited the brick-kiln, Bablu told us, while chatting during his break:

Bablu (24, Jatav): We (Jatavs) have always been *mazdoori* (manual workers), but now we are not dependent on them (Thakurs) anymore. I am still poor but I work hard and I will improve the future of my child.

Despite the relative *jati* advantage of Thakurs for accessing higher classes, we can speculate, based on our findings, that in future they might lose their advantage to the benefit of the lower *jatis*. Indeed, we found evidence of equalising chances of upward mobility from low class to middle and top-class for Jatavs and decreasing *jati* disadvantage compared to others. However, this is not valid for all the *jatis* at the bottom of the caste hierarchy: the *jati* disadvantage of the Telis, who are Muslims and traditionally oil-pressers, continue to be consistent over time, reducing their probability of experiencing upward mobility, irrespective of their social origins.

This thesis provides evidence of the *jati*-class association to weaken over time, however the occupational preferences continue to be influenced by ritual norms and caste stigma of purity. In line with the modernization theory, we found that the educational attainment plays an equalising role on the access to higher opportunities and mediates the effects of the *jati* and the social origins. However, the access to higher education is sensitive to the economic inequalities due to increasing demand for private education. The improvement of the future generations' life chances and the reduction of the inequality of opportunities highly depend on the development of the public education services and the implementation of formal vocational training in rural areas to reduce the competitive gap between the rural and urban working population.

6.8 Limits and further extensions

Beyond the strengths of this case study, which is the individual longitudinal analysis throughout fundamental changes, the possibility to disaggregate the caste at the *jati* level and the combination of qualitative and quantitative data and methods of analysis, there are some limits which call for further research.

First of all, considering the high variability of the *jati* hierarchy from villages to villages in rural India, generalising the findings might be problematic. Nevertheless, we made sure to facilitate the replicability of the analysis providing a detailed account of the methods used in each part of the thesis.

Meta-analysis could be attempted to identify points of convergence and divergences of the trends identified in Palanpur with comparable local studies in India.

Second, the absence of consistent data on the participation of women to work activities is a huge gap for the analysis of social mobility in Palanpur. Although intergenerational social mobility does not apply directly to women because they move to in-law's village after marriage, we found that their involvement in economic activities has important implication for the evolution of the socio-economic inequalities at the household and the *jati* level. The information collected in the interviews suggests that the participation of women to the working population is much higher than the figures provided by the official statistics at the national level. The case study of Palanpur will gain from carrying an in-depth survey among women. We hope there will be this possibility in future.

Third, further research may be done to take into account additional exogenous factors influencing social mobility beyond the ones discussed in this thesis, namely, the changing economic geography of Palanpur, the connectivity by road and trains, and the closure of the local cloth mills. In the interviews, we found evidence of factors like the conditions of labour recruitment, and the role played by networks which could be more developed. Still, there is material from the interviews to be further analysed. For instance, we found that alcohol consumption has strongly increased among the villagers, causing severe consequences for the health of the inhabitants and the rise of episodes of violence. While we were in Palanpur, a young boy of 18 years old immolated himself during a fight with his brother on issues of land succession. He was heavily drunk, and he died. Unfortunately, this tragedy is only one among several alcohol-related incidents we could list. We believe health inequalities and alcohol addiction to profoundly influence the chances of upward mobility of the present generation and the next. These aspects are of key importance for the implementation of effective public policies oriented to the improvement of the quality of life and the life chances of the rural population.

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Appendix A

Appendix

A.1 Semi-Structured Interviews guideline

1. Introduction

- (a) Introduction of myself, my field mate and my research
- (b) General information concerning the subject, his/her family and the persons around him/her
- (c) Permission to record

2. Occupation and Employment I: broad

- (a) The main occupation of the respondent and his/her family members
- (b) Place of occupation of the respondent and his/her family members
- (c) Secondary and tertiary occupations?

3. Farming and land assets

- (a) Lands: how many bighas (local measure) per family unit? Which kind of crops?
- (b) Lands transactions: sold or bought? Why? (Current and previous generation)
- (c) Forms of tenant-landlord arrangements (choutai, batai)?
- (d) How many people in the household involved? OR How many workers? Tractors? Tubewell?
- (e) Cattles: buffalos, cows, goats?

4. Occupation and Employment II: village diagnosis

- (a) Unemployment and underemployment among the young population
- (b) The decline of farming and conversion to non-farms
- (c) Non-farm occupations available in the village: description and definition of the main features and income.
- (d) Exposure to outside markets: nature of jobs, proportions, features, difficulties
- (e) Transport, connectivity and the role of the train in Palanpur
- (f) State of competition
- (g) Education and training: school attendance and quality (private/public)
- (h) (Alcohol addiction and unemployment)

5. Social stigma and employment in the village

- (a) Who does what in the village? Why? (Examples of *Palledari* and *Brick-kilns*)
- (b) The notion of "ganda kam" (dirty jobs) and "safai kam" (clean jobs) / "mehnat" (hardwork) and "dhimak ke kam" (cerebral work)
- (c) Caste and occupation: subject's point of view and anecdotes
- (d) The question of shame and honour in the kind of occupations
- (e) Women and work

6. Occupation and Employment III: details

- (a) Main occupation: according to which criteria? Any particular program NREGA, Asha, Angarwali etc.? Secondary and tertiary occupations?
- (b) Who in the family works? How many persons? Children and women?
- (c) History: personal, professional trajectory / Jobs of father (now and at the same age as the respondent) and job of brothers.
- (d) Description of the current jobs: internal organization (team, worker, domestic, etc.), hierarchical position and personal position, equipment required/owned

- (e) System of payment: wage, piece-rate, team sharing etc. Advances and other allowances for food, lodging, reimbursement fares etc. Who pays him?
- (f) Income (monthly, daily, etc.): how much in average?
- (g) Regularity: how many months/year work secure? How many days in the last 30 days? Days per week and hours per day (high season, low season)? Work amount as much as he/she wants? Changes in employer and search costs?
- (h) Contract (informal/formal): work arrangements, registration, social security, insurance, pension, leaves, awareness of employer legal obligations to workers, provisions of financial assistance by the employer in gift or wage advance
- (i) Level of responsibility in the internal organisation
- (j) The autonomy of decision and management of the work
- (k) Relation to the employer and the *thikedhar*
- (l) Danger, hardness and health issues (perception and anecdotes): notions of health and safety standards at work, history of accidents and crisis
- (m) Possibility of career evolution (internal mobility)
- (n) (Historicity of the economic sector: year of introduction, pioneers, diffusion, development)

7. Skills and qualifications

- (a) Formal education: level, domain, school, incidence on the job, evaluation of the quality
- (b) Skills: which skills owned? All the skills owned useful for the job? More skills required?
- (c) Training: technical training, on-the-job formation, experience skill in the field, technical skills, etc.
- (d) Apprentice-Mistri relation

8. Occupation and Employment IV: access and recruitment

- (a) Job searching process and application
- (b) Role of mobile phone and internet

- (c) Networks: A) social ties with family, family-in-law, neighbour-hoods, friends, tenants, mates, etc. B) political connections, involvement in associations and civic organizations C) recommendations, reputation and social support
- (d) Modes of recruitment: announce, thikedhar (intermediaries), mazdoor mandi (street markets), etc.
- (e) Evaluation of the skills and tests
- (f) Trust, debt bondage and informal agreement

9. Occupation and Employment V: personal satisfaction and complaints

- (a) Major difficulties faced by the subject in his/her work
- (b) Personal satisfaction: introduction of the notion of personal "choice" and "preference"
- (c) Future projections: wishes and concrete possibilities? Strategy? Main obstacles?
- (d) Aspirations for the children? What do they think? Any strategy to attain their aspirations?

10. Spatial mobility for work: migration and commuting

- (a) Duration: daily, more than one day and less than one week, more than one week and less than three months, more than three months, season or semi-permanent, permanent
- (b) Location and distance: into the district, out of the district but in the state, out of the state, out of the country
- (c) Local settlement: private house (owned or rented), work camp, guest house, someone other's house, workplace
- (d) Family status: alone, with some members of the household, with the full household / Reasons for this configuration.
- (e) Means of transport: train, bike, bus, etc.
- (f) Time of transport and costs
- (g) Only if migration: 1) state of integration, feeling, difficulties, etc.2) frequency of visits in Palanpur 3) remittances 4) aspirations for the future

(h) Attachment to the village and the family and preference for proximity

11. Capital access

- (a) Debts: To whom? How much? Reasons? Timespan?
- (b) The average price for a marriage of a girl in the family and strategy to find/save money
- (c) Management of the money in the family (how they share, who takes the money and manage the money).
- (d) Bank accounts use and loans
- (e) Kisan card? Ration card?
- (f) Moneylending: to/from whom? How much? Interests?

12. Form and Genealogy

- (a) Individual form (socio-demographic data of the respondent)
- (b) Three generations male arborescence

A.2 Fieldwork notes: genealogy survey

A.2.1 Premises

- (A) In 1958, 1964, 1975, 1984, 2009 and 2015 household surveys, each joint family sharing the same house and living under the same head are recorded with the same household ID. In the 1993 survey all the sons married are considered heads of their unit among the same patrifraternal joint household and with the father still alive who is also considered the head of the household. In 1993 we did not know which units are effectively sharing the same house, and there is no hierarchy among the heads.
- (B) After the partition of a new household unit among the patrifraternal joint family we lose, in some cases, the information concerning the familial link of the head: who is the brother of whom in the village? Who was the father of whom? The household code changes for every new unit losing the information related to the patrilineal lineage. Moreover, there are a lot of missing data and discrepancies.

(C) From one survey to another, we have observed some discrepancies in the composition of the joint family: the nature of the relationship and the names of the individual. Moreover, some subjects are accounted for with different household codes without having created a separate household unit. The share of errors and missing data is estimated at around 30%.

These problems might be due to different reasons:

- (C1) The label of "father", "brother", "sister" and "cousin" is not necessarily used by the subjects to indicate only blood relations but are commonly used as a distinctive sign of respect and affection between relatives, neighbours and close friends. For instance, some cousins have declared having the same father; some friends have declared to be brothers.
- (C2) Every villager has two to three different names: the official name as it appears in the ID card, the nickname and some common little names that are given to the children (chottu, kajal, billu etc.), and sometimes they keep using these unofficial names for the whole life. Commonly, the subjects do not even remember the official name of their kids or their parents. The attachment to the proper name is very different from western societies. Hence, the names of the individuals frequently change from one survey to another. However, names are not essential as such for us since we have the Individual ID attached to every individual surveyed at least once in the village. Names are useful to cross the information from one survey to another and check the exactitude of the correspondence between the individual and the ID across the surveys.

One of the major goals of my research in Palanpur is to measure and analyse the patterns and the determinants of social mobility at the intergenerational. Therefore, I need to have a clear picture of all the patrilineal lineage connecting the nuclear families from 1958 to 2015. In other words, I need the full arborescence from the root household in 1958 to the last units with the vertical and horizontal male lineage (patriarchs and brothers). As per the local norms, all the girls leave the village around 20 years old after marriage, and they go to live with their families in law, they lose their residency in Palanpur, and thus they are not included anymore in the survey. There are few exceptions of widowed coming back or unmarried women. For this reason, I only look at the intergenerational male lineage.

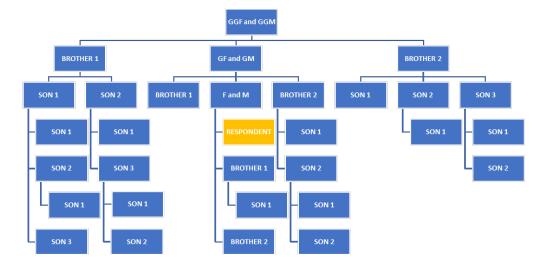


Figure A.1: Model of the family tree in Palanpur 2018

A.2.2 Strategy

I have exported on excel files the following variables from the demographic dataset of each survey: individual panel ID, original household ID, individual ID for that year, household ID for that year, name, head of the household and relation to the head. At the end of each interview, I ask the respondent to list the members of his entire genealogy over the last three generations, and I draw the family tree on my form following the model reported in Figure A.1.

Example. if the respondent is about 30 years old, I ask him to list the following members of his family: gran-grandfather and respective spouses (most of the respondents don't remember this level); grand-father and respective spouses; brothers of grand-fathers and respective children; father and mother; father's brothers and respective children; brothers and respective children; his spouse and their children. I also ask for every level the following additional information: how many daughters/sisters; fraternal order (this information is crucial because the strategy of job allocation/orientation designed by the parents generally follow a different path); status (alive, expired or migrated) and the current place of living of each unit. When I interview a woman, I ask about the genealogy of his husband, and I try to cross-check later with the husband himself or a member of his family.

When I collect the information on arborescence, I show the tree to the respondents, and I explain to them how it is organised. Respondents are generally very cooperative and enthusiastic with this exercise; they often

ask the other members for confirmation and all the members present at the moment of the interview enjoy to participate. Sometimes they also call by phone some distant relatives to check the information. I always spend a couple of minutes explaining my purpose in collecting their genealogy.

Everyday I check the genealogical information collected with the individual and household lists in the excel files to assess which are the joints family and which are not (with the temporal retrospective), and I use different colour codes to separate the units among the joint family. I indicate brotherhoods and other familial ties and the fraternal order for each unit. When the information does not match, I go back to the family and ask for clarifications. I surveyed a sample of approximative hundred families, which are not selected by criteria but correspond with the respondents' households of my extensive interviews.

Besides, I identified the cases with discrepancies and missing data from the dataset. I collect information about these households among to members of that "dynasty" if anyone is available in the village, from neighbours, or from the interviewers who take part to previous surveys (in particular I ask for clarifications to Gajenand Ahirwal who spent more than one year in Palanpur in 2008 and has an in-depth knowledge of all the inhabitants). I never rely only on one source but try at the maximum to triangulate the information, especially when they contradict data recorded in previous surveys. At the end of the whole process, I will merge with the panel the new dataset containing the following variables: individual ID, household ID, previous household ID, relation to the head, father's ID.

A.3 Survey 2008 - Module: Employment

Figure A.2: Survey 2008 - Module: Employment (page 1)

	:0 U U								Inve	nvestigator:	Investigator:		
					- A	CTIVITY SCH	EDULE (For	I. ACTIVITY SCHEDULE (For all eligible males)	nales)				
1. Activity Code	2. Write: (sp – if the act sp – if activiti	starting factivity carraities carries	rom the kied on we	starting from the last month and going backwards) tivity carried on was principal activity in that montlies carried on were subsidiary activity in that mont	and going k activity in / activity ir	2. Write: (starting from the last month and going backwards) p – if the activity carried on was principal activity in that month s – if activities carried on were subsidiary activity in that month		(,p, 8, s, a	re determined	on the basis	('p' & 's' are determined on the basis of 'Time Spent Criterion')	Criterion')	3. Code, if done outside Palanpur
-	Jan	Feb	Mar	Apr	Мау	Jun	lnſ	Aug	Sep	Oct	Nov	Dec	
1	माघ /	फाल्गुन	के /	वैशाख /	्रवेष्ठ /	अाषाह 🗸	श्रीवण /	भाद्रपद् /	आश्विन /	कार्तिक	मार्गशीष /	पौष /	
	महा		다	देसाख	4p Po	असाढ	सावन	भादो	कुवार		अचन	F.	
1													
2													
3													
4													
2													
9													
7													
8													
6													
10													
Status Code													

Figure A.3: Survey 2008 - Module: Employment (page 2)

U – Unemployed (Being not engaged in economic activity (work) but either making tangible efforts to seek 'work' or being available for 'work' if the 'work' is available W - Working or being engaged in economic activity (work) O – Not seeking any work. Out of Labor Force. 9 – Other (Specify in remarks) 4. Location Code: 2 - Moradabad, 1 – Chandausi, Status Code: 3-Delhi, 6. Whether made any effort to get work during those months? (V/N) Specify Monthwise. 5 – Casual Wage Labour Unskilled (Non Farm) (excluding any work in 4 – Casual Wage Labour Skilled Non- Farm (excluding any work in 7. If stopped looking actively for job (Status 'O'), specify why stopped. $1 - \mathsf{Own} \; \mathsf{Farm} \; \mathsf{Cultivation} \; \mathsf{Activities} \; \mathsf{(Own} \; \mathsf{or} \; \mathsf{leased} \; \mathsf{in)},$ 5. Number of months without work? Specify Months_ 3 – Mechanized farm activities (other's farm) 7 - Salaried Employment (farm or non-farm), 8 - Self employed (Professional Services) 10 -Business/Trade/Manufacturing 2 - Casual Wage Labour (Farm), 9 - Personal (Jajmani) Services, 6 – Employment in NREGA 1. Activity Codes: NREGA) NREGA)

Figure A.4: Survey 2008 - Module: Employment (page 3)

<u>PVS – E2</u> :	EMPLOYMENT SCHEE	DULE Date:
Hh No:		Investigator:
	II. CASUAL LABO	DRERS (For casual labourers apart from AL)
A. Respon	ndent Name	
(If more	you go to (Describe) e than one kind of casual ork done then use r sheet for second job)	
1. Nature o	of Job.	
2. How are	payments determined?	
job? (No Relative	use middle- ermediary to get the - 1, Contractor - 2, - 3, Friend - 4, Other in Remarks) - 9	
4. Payment men?	t, if made to the middle-	
a month	mately how many days in did you go to the ce to try for the job?	
	ny days in the above, not get the work at the ice.	

Figure A.5: Survey 2008 - Module: Employment (page 4)

What is the payment for your work? (Specify monetary and	
non-monetary payment)	
8. Did you get to work on this job as	
much as you desired (Yes or No)	
9. If above is no, why?	
10. Why did you choose this job instead of other choices (specify	
other choices)	
11. Why do you do daily job instead of migrating out of village?	
12.Referring back to the job,do you	
think there is discrimination based on caste or health status	
for this job? If yes, then of what kind?	
Killig :	

Remarks:

Figure A.6: Survey 2008 - Module: Employment (page 5)

III. NON-CULTIV 1. Description of Business	III. NON-CULTIVATION SELF-EMPLOYMENT (Mentha Plant, Oil Spiller, Shop Keepers, Marble Polishing own machine, Flour Mill etc) III. NON-CULTIVATION SELF-EMPLOYMENT (Mentha Plant, Oil Spiller, Shop Keepers, Marble Polishing own machine, Flour Mill etc) In onther contract of the work is seasonal, how many household work in this business? List Name the work? List the	Wentha Plant, Oil Spiller 3. If the work is seasonal, how many months do you get the work? List the months.	4. If you stay away from PPR for the work, how many days you stay away rom PPR away rom PPR away from PPR	Investigator:	Investigator:
		_			

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A.4 The determinants of household partition¹

We apply a threefold analysis of the partition determinants. First, we check whether the landowning and fertility levels affect the chances of partition. Second, we estimate the association of landowning and fertility variations with partitioning and third we explore whether there are some castespecific preferences for partitioning when controlling for fertility, land and other characteristics at individual and household levels.

We estimate the probability to partition at the individual level using a probit model (Table A.1). The sample is restricted to males aged from six to fifty (no partitions happened below or above this age range over the observed period). The controls included in the model are both at the individual level, age, education level, marital status, relation to head, and at the household level, status of the previous head, share of sons' wives, share of sons, share of brothers and household size. We measure fertility with the child-dependency ratio per household, the variation of the child-dependency ratio from the previous household status to the next one and the interaction between these two terms. Landowning is measured by the landowning status (landless versus landowner), the landowning size per household, the variation of the landowning from the previous household status to the next one, and the interaction between current landowning level and the variation term. Finally, we control for caste and time (post-1984 and time length between each survey).

The results show that partition is less likely to happen with age increasing while education seems to be not significant in the probability to partition, as well as the marital status. Being son or brother increases the chances to partition (Model 1,2,3), and at the household level, the greater is its size, the more partition may happen (Model 1). The share of son's wives is strongly and positively associated with the probability to partition (Model 1, 2, 3): the reason for this association may be the female discords arising between daughters in law as it has other studies have already shown (Caldwell, Reddy and Caldwell 1984).

Indeed, daughters-in-law are the major disputants in joint households because they are the only foreigners of the household and they have to go through a process of uprooting from their original family and village to a

¹These estimations are part of a working paper co-authored with Marco Fregoni (Università degli Studi di Milano) and discussed at IUSSP Conference on "Population, poverty and inequality" at Michigan University, June 2019.

Table A.1: Determinants of household partition at individual level.

	(Mod.1)		(Mod.2)		(Mod.3)	
y: individual partition at t+1						
Individual level						
age	-0.0212**	(0.026)	-0.0252**	(0.018)	-0.0235**	(0.026)
high education	0.285	(0.122)	0.222	(0.257)	0.262	(0.190)
married	0.248	(0.274)	0.279	(0.223)	0.263	(0.257)
son	1.093***	(0.000)	1.212***	(0.000)	1.234***	(0.000)
brother	3.831***	(0.000)	4.146***	(0.000)	4.149***	(0.000)
Household level		` ,		,		,
previous head died/migrated	0.0546	(0.716)	0.00125	(0.993)	0.0396	(0.785)
share of sons's wives	3.187***	(0.003)	2.957**	(0.015)	2.729**	(0.027)
share of sons	0.975	(0.154)	1.081*	(0.099)	1.103	(0.103)
share of brothers	-3.663***	(0.002)	-4.267***	(0.000)	-4.311***	(0.000)
household size	0.0441**	(0.025)	0.0341	(0.131)	0.0372	(0.119)
Fertility		` ,		,		` ′
child ratio			-0.0732	(0.754)	-0.0925	(0.700)
Δ_t^{t+1} child ratio	0.172**	(0.019)	-0.0115	(0.915)	-0.0200	(0.855)
child ratio $\times \Delta_t^{t+1}$ child ratio		,	0.287**	(0.035)	0.287**	(0.041)
Land				,		, ,
landless	3.078***	(0.000)	1.855***	(0.001)	2.073***	(0.000)
land		` ,	-0.0230***	(0.003)	-0.0217***	(0.006)
Δ_t^{t+1} land	-1.202***	(0.000)	-0.766***	(0.000)	-0.819***	(0.000)
land $\times \Delta_t^{t+1}$ land		,	-0.0250***	(0.000)	-0.0233***	(0.001)
Caste				,		, ,
Thakur					0.0266	(0.890)
Moria					0.201	(0.313)
Jatav					0.362*	(0.096)
Time						,
$year \ge 1984$	0.355**	(0.035)	0.320*	(0.065)	0.289	(0.109)
years between surveys	0.0604**	(0.016)	0.0663***	(0.009)	0.0626**	(0.015)
Obs	1162		1162		1162	
Pseudo-R ²	0.498		0.524		0.528	

p-values in parentheses

Years = 1958, 1964, 1975, 1984, 1993, 2009. Standard errors are clustered at household level. All variables in level at time t. Changes of owned land and child dependency ratio (<5 years) (i.e. Δ_t^{t+1}) represent the difference between the value at t+1 (i.e. the value of the original household for people that do not partition, while it refers to the value of the new household set by the partitioning individual) and the value of the original household at t.

^{*} p<0.10, ** p<0.05, *** p<0.01

situation where their primary relationship is with their sisters-in-law who are competing to gain the benevolence of their mother-in-law. At the opposite, the higher is the share of the head's brothers in the household, the less partition is likely to happen (Model 1,2,3): if the head is living with his brothers in the same household, it means that the household structure has already been assessed as a joint continuation after the death of their father. The share of the head's sons is also correlated with a higher probability of partition, although it is less significant (Model 2).

The nuclear unit who partitions has a higher fertility level than the household of origin (Model 1). This relation suggests that the propensity to partition may be determined by the fact that higher fertility of the current unit compared to other units in the original joint household acts like a push factor. The head of the joint household, or other members involved in the decision-making, may put pressure on the nuclear unit with higher fertility to get out of the household to reduce the internal demographic pressure on the joint estate and future land fragmentation.

Moreover, once the work utility of the children has reached a satisfying level for the family production and the support utility is ensured, the consumption utility of an additional child would weight more and disrupt the internal equilibrium, so that partition is more likely to occur. Another possible explanation of this association is that partitioning allows the nuclear unit to make fertility choices different from the average fertility of the original household, suggesting that fertility control is higher in a joint family. It is worth to be noted that in some cases when partitioning happens before the death of the former head the rights over land are freeze until the joint household continue to exist or they can even be lost in case of quarrels with the head. In this case, fertility is no longer constrained by the risk of future land fragmentation and the partitioned unit is forced to exit cultivation and convert in alternative means of livelihood.

Further, in Models 2 and 3, we can see that for the same variation of fertility, the higher the fertility of the original household, the stronger is the propensity to partition. This shows that the weight of the children in the previous household increases with their numerosity on the choice to partition because more they are, more they loom over the share of the future inheritance.

Concerning the relationship between landowning and partitioning: we have found a negative association in the model confirming our hypothesis

(Model 2,3).² The individuals who belong to a landless household are more likely to partition than individuals from landed ones since they have nothing to lose in terms of indivisible assets like land and livestock (Model 1,2,3). Also, landless households are more exposed to non-farm jobs opportunities, which may require to step out of the village (Mukhopadhyay 2011). Moving out on a temporary or seasonal basis, even if maintaining the residence in Palanpur, can contribute to loosen the ties with the joint family and eventually push some units to live separately.

Conversely, partitioning is less common among individuals belonging to large landholding households, because the rationale is to preserve the indivisibility of the ancestral estate. Indeed, the interaction between the variation of land and the original amount of land (Model 2,3) shows that the larger the landowning of the previous household, the lower the chance of partition.

Finally, the positive and significant association between Jatav and the probability to partition confirms the hypothesis of a caste effect which is not related to fertility or landowning. A possible interpretation relates to the fact that owning a large landholding is closely associated with the possession of a large house while in the case of landless, it is widespread to possess a one-room house. Jatav in Palanpur are still spatially segregated in a crowded area and have low standards of housing comfort. The lack of additional rooms and insalubrious conditions of living could motivate a young married couple to set up a separated household. Moreover, Jatav are the main recipient of government provision of loans for the building of cheap additional houses. Their willingness to partition might also have to do with the power of influence that women have in the decision-making of the household.

Jatav women, contrary to Thakurs and Morias, are more common to work outside the family farm and to migrate with their husband in cities for work; they experience more opportunities of empowerment towards the traditional social structures. Heyer's study of a community of Gounders in Tamil Nadu brings support to the hypothesis that the women participation to outside labour market contribute to loosening the this of patriarchy (2016). It has been acknowledged, for instance, that Jatav stick less strictly to the norm of arranged marriage: love marriages can arise from the experiences of migration for seasonal work in brick kilns where the social control of the village is less (Shah 2006). Love marriage may be an incentive for young couples to set up

²Landowning is calculated per household. Using per capita land owned and land owned per marital unit the relation is still negative and significant.

a separate household, or, in extreme cases of parental disapproval, partition is more than optional but necessary. Moreover, if Jatav women have more decisional power, we can also imagine that the share of son's wives weights more on the propensity to partition compare to other castes.

A.5 Secondary occupations and Education

Table A.2: Secondary occupation by class and by cohort

Cohort 1	LF	HS	MF	LS	SE	AL	MW	Total
Cultivation or livestock	0.4	14	1.1	19.6	27.9	17.9	15	6.1
Regular employment	3	4.7	3	3.6	4.7	5.4	0	3.3
Self-employment	3	0	2.6	1.8	0	1.8	10	2.5
Agricultural labour	0.8	2.3	23.3	3.6	4.7	7.1	5	10
Casual manual work	0.8	0	3	1.8	4.7	14.3	0	2.8
Total	100	100	100	100	100	100	100	100
Cohort 2	LF	HS	MF	LS	SE	AL	MW	Total
Cultivation or livestock	2.5	52	4.7	28.2	41.3	7.9	54.2	21
Regular employment	0	0	0.5	1.2	0	0	0	0.4
Self-employment	3.8	4	3.7	0	3.2	0	1.4	2.5
Agricultural labour	0	0	8.4	0	3.2	2.6	2.8	3.8
Casual manual work	2.5	0	11.1	1.2	6.4	34.2	4.2	8
Total	100	100	100	100	100	100	100	100
Cohort 3	LF	HS	MF	LS	SE	AL	MW	Total
Cultivation or livestock	27	56.3	15	56.4	51.8	11.8	53.1	40.4
Regular employment	0	0	0	2.6	1.2	0	1.4	0.9
Self-employment	2.7	12.5	6.5	7.7	1.2	0	2	3.8
Agricultural labour	0	0	4.7	0	0	11.8	7.5	4
Casual manual work	0	0	18.7	7.7	3.5	5.9	4.1	7.4
Total	100	100	100	100	100	100	100	100

Table A.3: Education level by jati and by year

Thakur	1958	1963	1975	1984	1993	2009	2015
No formal education	72.7	53.7	50	41.5	33.8	17.4	16.5
Class 1 to 5	9.1	12.2	14	6.2	13.8	15.3	17.5
Class 6 to 8	18.2	14.6	24	16.9	25	23.5	23.3
Class 9 to 12	0	19.5	10	32.3	25	35.7	31.1
Class beyond 12	0	0	2	3.1	2.5	8.2	11.7
Total	100	100	100	100	100	100	100
Moria	1958	1963	1975	1984	1993	2009	2015
No formal education	87.5	84.4	66.7	56.7	46.3	24	19
Class 1 to 5	10	2.2	12.5	3	15.9	19	17
Class 6 to 8	0	4.4	2.1	13.4	14.6	21	19
Class 9 to 12	2.5	4.4	10.4	22.4	20.7	29	31
Class beyond 12	0	4.4	8.3	4.5	2.4	7	14
Total	100	100	100	100	100	100	100
Jatav	1958	1963	1975	1984	1993	2009	2015
No formal education	95.2	95.7	96.4	97	80.4	60.3	48.2
Class 1 to 5	4.8	4.4	3.6	0	8.7	25.9	31.5
Class 6 to 8	0	0	0	3	4.4	5.2	5.6
Class 9 to 12	0	0	0	0	6.5	8.6	13
Class beyond 12	0	0	0	0	0	0	1.9
Total	100	100	100	100	100	100	100
Teli	1958	1963	1975	1984	1993	2009	2015
No formal education	100	100	85.7	68.8	67.7	28.6	16.7
Class 1 to 5	0	0	4.8	15.6	23.5	47.6	40.5
Class 6 to 8	0	0	4.8	12.5	0	7.1	14.3
Class 9 to 12	0	0	4.8	3.1	8.8	14.3	21.4
Class beyond 12	0	0	0	0	0	2.4	7.1
Total	100	100	100	100	100	100	100
Other	1958	1963	1975	1984	1993	2009	2015
No formal education	89.8	75.9	74	67	54.3	34	28.4
Class 1 to 5	10.2	17.2	11	11	15.2	19.6	21.6
Class 6 to 8	0	5.2	5.5	11	20	23.7	19.6
Class 9 to 12	0	1.7	5.5	9.9	10.5	18.6	24.5
Class beyond 12	0	0	4.1	1.1	0	4.1	5.9
Total	100	100	100	100	100	100	100

A.6 Multinomial Logit estimates

Table A.4: Multinomial logit model

	Coeff	Std.Err
Y = Top Class (destination)		
Middle class	-0.94***	(0.33)
Low class	0.74	(0.58)
Thakur	0.32	(0.30)
Moria	1.07***	(0.28)
Jatav	-0.15	(0.44)
Teli	-16.69	(4439.11)
Middle class \times Thakur	0.20	(0.53)
$\mbox{Middle class} \times \mbox{Moria}$	0.83*	(0.49)
${\rm Middle~class}\times{\rm Jatav}$	-16.19	(1402.94)
Middle class \times Teli	0.09	(4582.66)
Low class \times Thakur	-1.26	(0.99)
Low class \times Moria	0.00	(.)
Low class \times Jatav	-17.74	(1732.59)
Low class \times Teli	15.46	(4439.11)
Secondary education	0.65***	(0.20)
Married	-0.04	(0.17)
Eldest son	0.27	(0.17)
Household size	0.12***	(0.02)
Cohort=2	-1.60***	(0.21)
Cohort=3	-1.98***	(0.26)
Age 24-44	-0.23	(0.19)
Age +45	-0.50**	(0.25)
Y = Middle Class (destination)	base outcome	

Table A.4 continued from previous page

	Coeff	Std.Err
Y = Low Class (destination)		
Middle class	0.72*	(0.38)
Low class	1.11**	(0.56)
Thakur	0.08	(0.41)
Moria	0.14	(0.40)
Jatav	2.01***	(0.46)
Teli	1.04	(0.92)
Middle class \times Thakur	-0.77	(0.53)
$\label{eq:middle} \mbox{Middle class} \times \mbox{Moria}$	-0.36	(0.56)
${\rm Middle~class} \times {\rm Jatav}$	-1.22**	(0.56)
Middle class \times Teli	-0.72	(0.97)
Low class \times Thakur	-0.66	(0.91)
Low class \times Moria	0.00	(.)
Low class \times Jatav	-1.23*	(0.71)
Low class \times Teli	0.21	(1.09)
Secondary education	-0.07	(0.20)
Married	-0.26*	(0.16)
Eldest son	-0.29*	(0.16)
Household size	-0.13***	(0.03)
Cohort=2	0.77***	(0.26)
Cohort=3	1.74***	(0.27)
Age 24-44	-0.07	(0.17)
$\mathrm{Age}\ +45$	-0.10	(0.28)
Observations	1274	
Pseudo- R^2	0.24	

Standard errors in parentheses

^{*} p<0.10, ** p<0.05, *** p<0.01

Table A.5: Average marginal effects of jati per class of origin on class destination by cohort (multinomial logit model)

Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	\mathbf{Z}	P > z
Thakur	Top class	1	Top	0.072	0.068	1.06	0.29
	Top class	1	Middle	0.117	0.091	1.27	0.203
	Top class	1	Low	-0.194	0.205	-0.94	0.345
	Top class	2	Top	0.046	0.043	1.07	0.284
	Top class	2	Middle	0.053	0.042	1.26	0.209
	Top class	2	Low	-0.120	0.126	-0.95	0.342
	Top class	3	Top	0.035	0.034	1.01	0.311
	Top class	3	Middle	0.042	0.029	1.45	0.148
	Top class	3	Low	-0.074	0.090	-0.82	0.415
	Middle class	1	Top	-0.070	0.065	-1.06	0.288
	Middle class	1	Middle	-0.074	0.088	-0.84	0.403
	Middle class	1	Low	0.199	0.191	1.04	0.297
	Middle class	2	Top	-0.048	0.052	-0.92	0.357
	Middle class	2	Middle	0.036	0.055	0.66	0.507
	Middle class	2	Low	0.175	0.149	1.18	0.239
	Middle class	3	Top	-0.040	0.070	-0.57	0.57
	Middle class	3	Middle	0.109	0.068	1.59	0.112
	Middle class	3	Low	0.164	0.167	0.98	0.326
	Low class	1	Top	-0.002	0.012	-0.18	0.859
	Low class	1	Middle	-0.043	0.018	-2.38	0.017
	Low class	1	Low	-0.005	0.043	-0.12	0.902
	Low class	2	Top	0.002	0.036	0.05	0.961
	Low class	2	Middle	-0.089	0.039	-2.31	0.021
	Low class	2	Low	-0.055	0.110	-0.5	0.615
	Low class	3	Top	0.005	0.072	0.07	0.946
	Low class	3	Middle	-0.151	0.067	-2.25	0.024
	Low class	3	Low	-0.090	0.173	-0.52	0.604
Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	Z	P > z
Moria	Top class	1	Тор	0.227	0.061	3.75	0.000
1110110	Top class	1	Middle	0.412	0.079	5.21	0.000
	Top class	1	Low				
	Top class	2	Top	0.186	0.045	4.1	0.000
	Top class	2	Middle	0.257	0.068	3.79	0.000
	Top class	2	Low				
	Top class	3	Top	0.148	0.038	3.93	0.000

Table A.5 continued from previous page $\,$

				•	1 0		
Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	Z	P > z
	Top class	3	Middle	0.191	0.055	3.47	0.001
	Top class	3	Low				
	Middle class	1	Top	-0.216	0.059	-3.69	0.000
	Middle class	1	Middle	-0.362	0.075	-4.81	0.000
	Middle class	1	Low				
	Middle class	2	Top	-0.176	0.052	-3.39	0.001
	Middle class	2	Middle	-0.185	0.075	-2.48	0.013
	Middle class	2	Low				
	Middle class	3	Top	-0.133	0.066	-2	0.046
	Middle class	3	Middle	-0.080	0.081	-0.99	0.321
	Middle class	3	Low				
	Low class	1	Top	-0.011	0.010	-1.02	0.31
	Low class	1	Middle	-0.050	0.019	-2.67	0.008
	Low class	1	Low				
	Low class	2	Top	-0.010	0.033	-0.3	0.765
	Low class	2	Middle	-0.071	0.046	-1.55	0.121
	Low class	2	Low				
	Low class	3	Top	-0.015	0.068	-0.22	0.827
	Low class	3	Middle	-0.111	0.079	-1.4	0.161
	Low class	3	Low	•			
Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	\mathbf{Z}	P > z
Jatav	Top class	1	Top	-0.099	0.093	-1.07	0.285
	Top class	1	Middle	-0.293	0.045	-6.51	0.000
	Top class	1	Low	-0.645	0.112	-5.73	0.000
	Top class	2	Top	-0.070	0.046	-1.53	0.125
	Top class	2	Middle	-0.081	0.019	-4.36	0.000
	Top class	2	Low	-0.272	0.088	-3.1	0.002
	Top class	3	Top	-0.074	0.032	-2.31	0.021
	Top class	3	Middle	-0.046	0.013	-3.69	0.000
	Top class	3	Low	-0.169	0.066	-2.54	0.011
	Middle class	1	Top	-0.057	0.087	-0.66	0.51
	Middle class	1	Middle	0.171	0.060	2.84	0.004
	Middle class	1	Low	0.438	0.118	3.7	0.000
	Middle class	2	Top	-0.262	0.080	-3.26	0.001
	Middle class	2	Middle	-0.083	0.064	-1.29	0.199
	Middle class	2	Low	0.040	0.117	0.34	0.735

Table A.5 continued from previous page $\,$

Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	Z	P > z
	Middle class	3	Тор	-0.364	0.080	-4.53	0.000
	Middle class	3	Middle	-0.155	0.070	-2.2	0.028
	Middle class	3	Low	-0.081	0.111	-0.73	0.465
	Low class	1	Top	0.156	0.046	3.37	0.001
	Low class	1	Middle	0.122	0.044	2.76	0.006
	Low class	1	Low	0.207	0.067	3.1	0.002
	Low class	2	Top	0.332	0.076	4.34	0.000
	Low class	2	Middle	0.164	0.063	2.62	0.009
	Low class	2	Low	0.232	0.098	2.38	0.017
	Low class	3	Top	0.438	0.085	5.15	0.000
	Low class	3	Middle	0.201	0.071	2.84	0.005
	Low class	3	Low	0.250	0.116	2.16	0.03
Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	Z	P > z
Teli	Top class	1	Top	-0.504	0.056	-9.01	0.000
	Top class	1	Middle	-0.293	0.045	-6.51	0.000
	Top class	1	Low	-0.330	0.150	-2.2	0.028
	Top class	2	Top	-0.186	0.037	-5.04	0.000
	Top class	2	Middle	-0.081	0.019	-4.36	0.000
	Top class	2	Low	-0.194	0.095	-2.05	0.04
	Top class	3	Top	-0.127	0.031	-4.06	0.000
	Top class	3	Middle	-0.046	0.013	-3.69	0.000
	Top class	3	Low	-0.137	0.067	-2.04	0.041
	Middle class	1	Top	0.397	0.114	3.48	0.000
	Middle class	1	Middle	0.235	0.052	4.49	0.000
	Middle class	1	Low	0.125	0.136	0.92	0.359
	Middle class	2	Top	0.020	0.164	0.12	0.902
	Middle class	2	Middle	0.013	0.056	0.23	0.817
	Middle class	2	Low	-0.113	0.128	-0.88	0.376
	Middle class	3	Top	-0.129	0.211	-0.61	0.539
	Middle class	3	Middle	-0.045	0.071	-0.64	0.522
	Middle class	3	Low	-0.177	0.111	-1.6	0.11
	Low class	1	Top	0.107	0.101	1.06	0.289
	Low class	1	Middle	0.058	0.032	1.8	0.072
	Low class	1	Low	0.205	0.072	2.83	0.005
	Low class	2	Top	0.165	0.161	1.03	0.303
	Low class	2	Middle	0.068	0.053	1.28	0.201

Table A.5 continued from previous page $\,$

Jati	Destination	Cohort	Origin	dy/dx	Std. Err.	Z	P > z
	Low class	2	Low	0.307	0.110	2.8	0.005
	Low class	3	Top	0.257	0.211	1.22	0.223
	Low class	3	Middle	0.092	0.071	1.28	0.199
	Low class	3	Low	0.314	0.118	2.67	0.008

A.7 Pictures from the fieldwork

Figure A.7: Brick-kiln's workers get their weekly wage from the $\it tikedar$ (contractor)

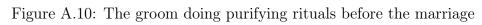


Figure A.8: Workers from Palanpur who heat the bricks in the brick-kiln of Sirsi



Figure A.9: Getting contacts of migrants in Palanpur for the next fieldwork in Himachal Pradesh







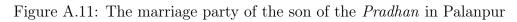




Figure A.12: The owners of a motor bike repairing shop in Chandausi from Palanpur $\,$





Figure A.13: The family who hosted me during the fieldwork

Figure A.14: A family of migrants from Palanpur in Baddi(Hmachal Pradesh)







Figure A.16: Ongoing individual interview in Palanpur





Figure A.17: Ongoing individual interview in Sohana (Punjab)

Figure A.18: Operations of toilet building in Palanpur under the Swatchh Bharat campaign launched by Modi in 2018



Figure A.19: Palledari (porters) from Palanpur at work in Santa Mill (Chandausi)

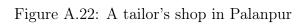


Figure A.20: The public primary school in Palanpur





Figure A.21: Railway's workers in Palanpur





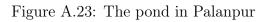




Figure A.24: Workers from Palanpur making bricks in the brick-kiln in Sirsi







References

- ABERCROMBIE, N., AND J. URRY (1983): Capital, labour, and the middle classes. Allen & Unwin.
- ABRAHAM, V. (2009): "Employment growth in rural India: distress-driven?," Economic and Political Weekly, pp. 97–104.
- ADLER, P. S., AND S.-W. KWON (2002): "Social capital: Prospects for a new concept," *Academy of management review*, 27(1), 17–40.
- Ambedkar, B. R., and V. Rodrigues (2002): The essential writings of BR Ambedkar. Oxford University Press.
- APPADURAI, A. (1988): "Putting hierarchy in its place," Cultural anthropology, 3(1), 36–49.
- ASHER, S., AND P. NOVOSAD (2016): "Market access and structural transformation: Evidence from rural roads in India," *Manuscript: Department of Economics, University of Oxford.*
- ASLANY, M. (2019): "The Indian middle class, its size, and urban-rural variations," Contemporary South Asia, 27(2), 196–213.
- ATHREYA, V., G. BÖKLIN, G. DJURFELDT, AND S. LINDBERG (1987): "Identification of agrarian classes: a methodological essay with empirical material from south India," *The Journal of Peasant Studies*, 14(2), 147–190.
- Bailey, F. G. (1963): "Closed social stratification in India," European Journal of Sociology/Archives Européennes de Sociologie, 4(1), 107–124.
- Ballarino, G., and N. Panichella (2017): "Posizione sociale e mobilità geografica nell'Italia della seconda metà del XX secolo," *Social Policies*, 4(1), 29–52.

BANERJEE, B. (1984): "Information flow, expectations and job search: Rural-to-urban migration process in India," *Journal of Development Economics*, 15(1-3), 239–257.

- Banfield, E. C. (1967): "The moral basis of a backward society.," .
- BARBIERI, P. (2003): "Social capital and self-employment: a network analysis experiment and several considerations," *International sociology*, 18(4), 681–701.
- BARDHAN, P. (1982): "Agrarian class formation in India," *The Journal of Peasant Studies*, 10(1), 73–94.
- BARDHAN, P., AND D. MOOKHERJEE (2003): "Political economy of land reforms in West Bengal 1978–98," Department of Economics at University of California, Berkeley and Boston University, Working Paper.
- BASILE, E. (2013): Capitalist development in India's informal economy. Routledge.
- Basile, E., B. Harriss-White, et al. (2000): Corporative capitalism: Civil society and the politics of accumulation in small town India. Queen Elizabeth House Oxford.
- BASOLE, A., AND D. BASU (2011a): "Relations of production and modes of surplus extraction in India: Part I-agriculture," *Economic and Political Weekly*, pp. 41–58.
- ——— (2011b): "Relations of production and modes of surplus extraction in India: Part II-'informal'industry," *Economic and Political Weekly*, pp. 63–79.
- BATES, C. (1995): Race, Caste and Tribe in Central India: the early origins of Indian anthropometry. University of Edinburgh, Centre for South Asian Studies Edinburgh.
- BAYLY, S. (2001): Caste, society and politics in India from the eighteenth century to the modern age, vol. 3. Cambridge University Press.
- BECKERT, J. (2009): "The great transformation of embeddedness: Karl Polanyi and the new economic sociology," *Beckert Jens*, pp. 38–55.
- BEIDELMAN, T. O. (1959): A comparative analysis of the jajmani system, no. 8. Association for Asian Studies.

BERGMAN, M. M., AND D. JOYE (2005): "Comparison social stratification schemata: CAMSIS, CSP-CH, Goldthorpe, ISCO-88, Treiman, and Wright," *University of Cambridge, Cambridge Studies in Social Research*, No10.

- BERNARDI, F., AND G. BALLARINO (2016): Education, occupation and social origin: A comparative analysis of the transmission of socio-economic inequalities. Edward Elgar Publishing.
- BERREMAN, G. D. (1968): "The concept of caste," *International Encyclopaedia of the Social Sciences*, 2.
- BÉTEILLE, A. (1998): "The idea of indigenous people," Current anthropology, 39(2), 187–192.
- Beteille, A. (2012): Caste, class and power: changing patterns of stratification in a Tanjore village. Oxford University Press.
- Beteille, A., et al. (1969): "Castes old and new. Essays in social structure and social stratification.," Castes old and new. Essays in social structure and social stratification.
- BHATTACHARYA, P. (1998): "The informal sector and rural-to-urban migration: some Indian evidence," *Economic and Political Weekly*, pp. 1255–1262.
- BINSWANGER-MKHIZE, H. P. (2012): "India 1960-2010: Structural change, the rural non-farm sector, and the prospects for agriculture," in *Center on Food Security and the Environment Stanford Symposium Series on Global Food Policy and Food Security in the 21st Century, Stanford University*. Citeseer.
- BLAU, P. M., AND O. D. DUNCAN (1967): "The American occupational structure.,".
- BLISS, C., P. LANJOUW, AND N. STERN (1998): "Population growth, employment expansion and technological change," *Economic Development in Palanpur Over Five Decades*, pp. 243–312.
- BLISS, C. J., AND N. STERN (1982): Palanpur: The economy of an Indian village. Oxford University Press.
- BOURDIEU, P. (1980): "Le capital social: notes provisoires," Actes de la recherche en sciences sociales, 31(1), 2–3.

BRASS, T. (1999): Towards a comparative political economy of unfree labour: Case studies and debates, no. 16. Psychology Press.

- ——— (2000): "Labour in post-colonial India: A response to Jan Breman," The Journal of Peasant Studies, 28(1), 126–146.
- Breen, R., R. Breen Jr, et al. (2004): Social mobility in Europe. Oxford University Press.
- BREEN, R., AND J. H. GOLDTHORPE (1997): "Explaining educational differentials: Towards a formal rational action theory," *Rationality and society*, 9(3), 275–305.
- ——— (2001): "Class, mobility and merit the experience of two British birth cohorts," *European sociological review*, 17(2), 81–101.
- Breen, R., and J. O. Jonsson (2005): "Inequality of opportunity in comparative perspective: Recent research on educational attainment and social mobility," *Annu. Rev. Sociol.*, 31, 223–243.
- ———— (2007): "Explaining change in social fluidity: educational equalization and educational expansion in twentieth-century Sweden," *American journal of sociology*, 112(6), 1775–1810.
- Breen, R., and D. Rottman (1995): "Class analysis and class theory," *Sociology*, 29(3), 453–473.
- Breman, J. (1996): Footloose labour: working in India's informal economy, vol. 2. Cambridge University Press.
- Breman, J., et al. (1993): Beyond patronage and exploitation: changing agrarian relations in South Gujarat. Oxford University Press.
- ———— (1994): Wage hunters and gatherers: search for work in the urban and rural economy of South Gujarat. Oxford University Press.
- ——— (2007): Labour bondage in west India: from past to present. Oxford University Press New Delhi.
- (2016): "At work in the informal economy of India: A perspective from the bottom up (OIP)," OUP Catalogue.
- Breman, J., P. Kloos, and A. Saith (1997): The village in Asia revisited. Oxford University Press.

Burt, R. S. (2009): Structural holes: The social structure of competition. Harvard university press.

- Caldwell, J. C. (1976): "Toward a restatement of demographic transition theory," *Population and development review*, pp. 321–366.
- Caldwell, J. C., P. H. Reddy, and P. Caldwell (1984): "The determinants of family structure in rural South India," *Journal of Marriage and the Family*, pp. 215–229.
- CHAKRABORTY, A. (1981): "Tenancy and mode of production," *Economic* and *Political Weekly*, pp. A5–A14.
- CHAKRABORTY, D., AND A. GUHA (2009): "Infrastructure and economic growth in India: Analysing the village-level connectivity scenario of the states," *Journal of Infrastructure Development*, 1(1), 67–86.
- CHAND, R., R. SAXENA, AND S. RANA (2015): "Estimates and analysis of farm income in India, 1983–84 to 2011–12," *Economic and Political Weekly*, 50(22), 139–145.
- CHANDRA, N., AND C. SINGH (1983): "Working Condition of Brick-Kiln Workers," *National Labour Institute Bulletin*, 9(1).
- Chandrasekhar, C., and J. Ghosh (2013): "The changing face of urban poverty," *The Business Line*.
- CHANDRASEKHAR, S. (2011): "Workers commuting between the rural and urban: Estimates from NSSO data," *Economic and Political Weekly*, pp. 22–25.
- CHANDRASEKHAR, S., AND A. SHARMA (2015): "Urbanization and spatial patterns of internal migration in India," Spatial demography, 3(2), 63–89.
- CHARI, S. (2000): "The agrarian origins of the knitwear industrial cluster in Tiruppur, India," World development, 28(3), 579–599.
- CHATTERJEE, U., R. MURGAI, AND M. RAMA (2015): Job opportunities along the rural-urban gradation and female labor force participation in india. The World Bank.
- Chaturvedi, V. (2012): Mapping Subaltern Studies and the Postcolonial (Mappings Series). Verso Books.

Chaudhuri, M. (1987): "Class Analysis in a Village Society: A Cluster Theoretic Approach," *Economic and Political Weekly*, pp. 2121–2125.

- CHAYANOV, A. V. (1966): "On the theory of non-capitalist economic systems," The theory of peasant economy, pp. 1–28.
- CHEKKI, D. A. (1970): "Social stratification and trends of social mobility in modern India," *Sociologus*, pp. 146–163.
- CHEN, M. A., AND G. RAVEENDRAN (2012): "Urban employment in India: recent trends and patterns," *Margin: The Journal of Applied Economic Research*, 6(2), 159–179.
- COBALTI, A. (1989): "A relative mobility table," Quality and Quantity, 23(2), 205–220.
- COBALTI, A., AND A. SCHIZZEROTTO (1994): La mobilità sociale in Italia. il Mulino.
- COHN, B. S. (2019): "The census, social structure, and objectification in South Asia,".
- COOMES, O. T., F. GRIMARD, AND V. DIAZ (2001): "Peasant farm size and family size: a causality analysis from the Peruvian Amazon," in *NEUDC Conference*, *Boston*, *MA*.
- CORBRIDGE, S., AND J. HARRISS (2013): Reinventing India: Liberalization, Hindu nationalism and popular democracy. John Wiley & Sons.
- DAS, R. J. (2004): "Social capital and poverty of the wage-labour class: problems with the social capital theory," *Transactions of the Institute of British Geographers*, 29(1), 27–45.
- DAS GUPTA, M. (1995): "Fertility decline in Punjab, India: parallels with historical Europe," *Population Studies*, 49(3), 481–500.
- DASGUPTA, P., AND B. GOLDAR (2006): "Female labour supply in rural India: An econometric analysis," *Indian Journal of Labour Economics*, 49(2), 293–310.
- DAVIS, K. (1941): "Intermarriage in caste societies," American Anthropologist, 43(3), 376–395.
- DE JANVRY, A., AND C. GARRAMON (1977): "The dynamics of rural poverty in Latin America," *The Journal of Peasant Studies*, 4(3), 206–216.

DE NEVE, G. (2005): The everyday politics of labour: Working lives in India's informal economy. Berghahn Books.

- DE ZWART, F. (2000): "The logic of affirmative action: Caste, class and quotas in India," *Acta Sociologica*, 43(3), 235–249.
- Deliège, R. (2004): Les castes en Inde aujourd'hui. Presses universitaires de France.
- DENIS, E., AND M.-H. ZÉRAH (2014): "Rural-urban linkages: India case study," .
- DESAI, I. (1971): "Understanding Occupational Change in India," *Economic and Political Weekly*, pp. 1094–1098.
- DESAI, S., AND A. DUBEY (2012): "Caste in 21st century India: Competing narratives," *Economic and political weekly*, 46(11), 40.
- DESAI, S., AND R. VANNEMAN (2015): "India human development surveyii (ihds-ii), 2011-12," ICPSR36151-v2. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 31.
- DESHPANDE, A. (2000): "Does caste still define disparity? A look at inequality in Kerala, India," American Economic Review, 90(2), 322–325.
- ——— (2017): "Affirmative action in India," in *Race and Inequality*, pp. 77–90. Routledge.
- DESHPANDE, M. S. (2010): "History of the Indian caste system and its impact on India today,".
- DESHPANDE, R., AND S. PALSHIKAR (2008): "Occupational Mobility: How Much Does Caste Matter?," *Economic and Political Weekly*, pp. 61–70.
- DHANAGARE, D. N. (1987): "Green revolution and social inequalities in rural India," *Economic and political weekly*, pp. AN137–AN144.
- DORIN, B., AND C. AUBRON (2016): "Croissance et revenu du travail agricole en Inde. Une économie politique de la divergence (1950-2014)," Économie rurale. Agricultures, alimentations, territoires, (352), 41–65.
- DOVERI, A. (2000): "Land, fertility, and family: A selected review of the literature in historical demography," *Genus*, pp. 19–59.

Drèze, J., P. Lanjouw, and N. Stern (1992): "Economic mobility and agricultural labour in rural India: a case study," *Indian Economic Review*, 27, 25–54.

- Dreze, J. P., and A. Mukherjee (1989): "Labour contracts in rural India: Theories and evidence," in *The balance between industry and agriculture in economic development*, pp. 233–265. Springer.
- Dube, S. (1985): "Peasant insurgency and peasant consciousness," *Economic* and political weekly, pp. 445–448.
- DUBE, S. C. (2017): Indian village. Routledge.
- DUMONT, L. (1980): Homo hierarchicus: The caste system and its implications. University of Chicago Press.
- DUPONT, V. (1991): "Les mobiles du travail: itinéraires de travailleurs de la petite industrie textile en Inde de l'Ouest," *Purusartha*, pp. 69–93.
- DUTT, N. K. (1968): "Origin and Growth of Caste in India, Vol. I, Calcutta: Pirma KI,".
- EATON, R. M., AND R. M. EATON (1993): The rise of Islam and the Bengal frontier, 1204-1760, vol. 17. Univ of California Press.
- ELBERS, C., P. LANJOUW, J. A. MISTIAEN, AND B. ÖZLER (2008): "Reinterpreting between-group inequality," *The Journal of Economic Inequality*, 6(3), 231–245.
- ELLIS, F. (1998): "Household strategies and rural livelihood diversification," The journal of development studies, 35(1), 1–38.
- EPSTEIN, T. S. (2007a): "Back to the Village (NIAS Lecture No. L2-07),".
- ——— (2007b): "Poverty, caste, and migration in South India," Out of, p. 199.
- ERIKSON, R., AND J. H. GOLDTHORPE (1987): "Commonality and variation in social fluidity in industrial nations. Part I: A model for evaluating the 'FJH hypothesis'," *European sociological review*, 3(1), 54–77.
- ———— (1992): The constant flux: A study of class mobility in industrial societies. Oxford University Press, USA.
- Erikson, R., and J. O. Jonsson (1996): Can education be equalized?: The Swedish case in comparative perspective. Westview Press.

ERTMAN, T. (2017): "Max weber's the economic ethic of the world religions: A neglected social science classic?," in *Max Weber's Economic Ethic of the World Religions: An Analysis*, pp. 3–36. Cambridge University Press.

- EVANS, G. (1992): "Testing the validity of the Goldthorpe class schema," European Sociological Review, 8(3), 211–232.
- ———— (1998): "On tests of validity and social class: why Prandy and Blackburn are wrong," *Sociology*, 32(1), 189–202.
- EVANS, G., AND C. MILLS (1998): "A latent class analysis of the criterion-related and construct validity of the Goldthorpe class schema," *European sociological review*, 14(1), 87–106.
- (2000): "In search of the wage-labour/service contract: new evidence on the validity of the Goldthorpe class schema," The British journal of sociology, 51(4), 641–661.
- EYCK, K. V., ET AL. (2003): "Flexibilizing employment: an overview," Discussion paper, International Labour Organization.
- FEATHERMAN, D. L., R. M. HAUSER, AND R. M. HAUSER (1978): Opportunity and Change Studies in Population. New York: Academic Press.
- FEATHERMAN, D. L., F. L. JONES, AND R. M. HAUSER (1975): "Assumptions of social mobility research in the US: The case of occupational status," *Social science research*, 4(4), 329–360.
- FERRY, M., J. NAUDET, AND O. ROUEFF (2018): "Seeking the Indian Social Space. A Multidimensional Portrait of the Stratifications of Indian Society," South Asia Multidisciplinary Academic Journal.
- FINE, B., AND A. SAAD-FILHO (2004): "Marx's,".
- FOSTER, A. D., AND M. R. ROSENZWEIG (2004): "Agricultural productivity growth, rural economic diversity, and economic reforms: India, 1970–2000," *Economic Development and Cultural Change*, 52(3), 509–542.
- FREED, S. A., AND R. S. FREED (1982): "Changing family types in India," *Ethnology*, 21(3), 189–202.
- Fuller, C. J. (1989): "Misconceiving the grain heap: a critique of the concept of the Indian jajmani system," *Money and the morality of exchange*, pp. 33–63.

Gallez, C., and V. Kaufmann (2009): "Aux racines de la mobilité en sciences sociales: contribution au cadre d'analyse sociohistorique de la mobilité urbaine," De l'histoire des transports à l'histoire de la mobilité, pp. 41–55.

- GANZEBOOM, H. B., AND R. LUIJKX (1989): "INTERGENERATIONAL CLASS MOBILITY IN COI\1PARATIVE PERSPECTIVE," Research in social Stratification and Mobility, 8, 3–84.
- GHOSH, J. (2016): "Capturing 'work': The journey of the NSSO," Sarvek-shana, pp. 12–21.
- GHURYE, G. S. (1961): Caste, class, and occupation. Popular Book Depot.
- ——— (1969): Caste and race in India. Popular Prakashan.
- GIBSON, J., G. DATT, R. MURGAI, AND M. RAVALLION (2017): "For India's rural poor, growing towns matter more than growing cities," World Development, 98, 413–429.
- GIDDENS, A. (1998): Conversations with Anthony Giddens. Making Sense of Modernity. Stanford University Press.
- GIDDENS, A., AND A. GIDDENS (1973): The class structure of the advanced societies. Hutchinson London.
- GIDWANI, V., AND K. SIVARAMAKRISHNAN (2003): "Circular migration and rural cosmopolitanism in India," *Contributions to Indian sociology*, 37(1-2), 339–367.
- GILL, K. (2006): "Deprived Castes and Privileged Politics: An Urban Informal Market in Contemporary India," *Economic and Political Weekly*, pp. 133–141.
- GLENN, N. D., A. A. ROSS, AND J. C. TULLY (1974): "Patterns of intergenerational mobility of females through marriage," *American Sociological Review*, pp. 683–699.
- GOLDTHORPE, J. H. (2005): "Progress in sociology: The case of social mobility research," Analyzing inequality: Life chances and social mobility in comparative perspective, pp. 56–82.
- GOLDTHORPE, J. H., AND O. F. J. H. GOLDTHORPE (2000): On sociology: Numbers, narratives, and the integration of research and theory. Oxford University Press on Demand.

Goli, S., N. K. Maurya, and M. K. Sharma (2015): "Continuing caste inequalities in rural Uttar Pradesh," *International Journal of Sociology and Social Policy*.

- GOOPTU, N., ET AL. (2001): The politics of the urban poor in early twentieth-century India, vol. 8. Cambridge University Press.
- Gooptu, N., and J. Parry (2017): Persistence of poverty in India. Routledge.
- GOULD, H. A. (1958): "The Hindu jajmani system: a case of economic particularism," Southwestern Journal of Anthropology, 14(4), 428–437.
- ——— (1990): "The Indian village: a sociological perspective," *Politics and Caste*.
- GOULD, H. A., AND H. A. GOULD (1990): The Hindu Caste System: Politics and caste, vol. 3. South Asia Books.
- GRANOVETTER, M. (2000): Le marché autrement: les réseaux dans l'économie. Desclée de Brouwer Paris.
- Granovetter, M. S. (1977): "The strength of weak ties," in *Social networks*, pp. 347–367. Elsevier.
- GRUSKY, D. B., AND R. M. HAUSER (1984): "Comparative social mobility revisited: models of convergence and divergence in 16 countries," *American Sociological Review*, pp. 19–38.
- GRUSKY, D. B., AND J. B. SØRENSEN (1998): "Can class analysis be salvaged?," *American journal of Sociology*, 103(5), 1187–1234.
- Guérin, I., S. Ponnarasu, G. Venkatasubramanian, and S. Michiels (2012): "Ambiguities and paradoxes of the decent work deficit: bonded migrants in Tamil Nadu," *Global labour journal*, 3(1), 118–142.
- Guérin, I., and A. Prakash (2009): "India's Unfree Workforce: Of Bondage Old and New," .
- Guérin, I., M. Roesch, S. Michiels, and G. Venkatasubramanian (2012): "Dettes, protections et solidarités en Inde du Sud," *Economies et sociétés*.

GUÉRIN, I., AND R. SRIVASTAVA (2012): "Labour regulations and labour standards in India: Decent work," *Labour*, 2, 20–2012.

- Guérin, I., G. Venkatasubramanian, and S. Kumar (2015): "Debt bondage and the tricks of capital," *Economic and Political Weekly*, 50(26), 26–27.
- GUEST, A. M., N. S. LANDALE, AND J. C. McCANN (1989): "Intergenerational occupational mobility in the late 19th century United States," *Social Forces*, 68(2), 351–378.
- Guha, R. (1999): Elementary aspects of peasant insurgency in colonial India. Duke University Press.
- Guha, R., et al. (1997): Dominance without hegemony: History and power in colonial India. Harvard University Press.
- GUPTA, D. (2004): Caste in question: Identity or hierarchy?, vol. 12. Sage.
- HAGGBLADE, S., P. HAZELL, AND T. REARDON (2010): "The rural non-farm economy: Prospects for growth and poverty reduction," World development, 38(10), 1429–1441.
- HAIR JR, J., R. ANDERSON, R. TATHAM, AND W. BLACK (1995): "Multivariate data analysis. 3rd Macmillan," New York, NY.
- HARDIMAN, D. (1976): "Politicisation and Agitation among Dominant Peasants in Early Twentieth Century India: Some Notes," *Economic and Political Weekly*, pp. 365–371.
- HARRISS, J. (2013): "Does 'Landlordism'Still Matter? Reflections on Agrarian Change in I ndia," *Journal of Agrarian Change*, 13(3), 351–364.
- HARRISS, J., K. P. KANNAN, AND G. RODGERS (1990): Urban labour market structure and job access in India: A study of Coimbatore, no. 92. International Institute for Labour Studies.
- HARRISS-WHITE, B. (2003a): India working: Essays on society and economy, vol. 8. Cambridge University Press.
- ———— (2003b): "Inequality at work in the informal economy: Key issues and illustrations," *Int'l Lab. Rev.*, 142, 459.

———— (2017): "Matter in motion: Work and livelihoods in India's economy of waste," in *Critical perspectives on work and employment in globalizing India*, pp. 95–111. Springer.

- ———— (2018): "Awkward classes and India's development," Review of Political Economy, 30(3), 355–376.
- HARRISS-WHITE, B., ET AL. (1996): A political economy of agricultural markets in South India: masters of the countryside. Sage Publications India Pvt Ltd.
- HARRISS-WHITE, B., AND E. JANAKARĀJAN (2004): Rural India facing the 21st century, vol. 1. Anthem Press.
- HARVEY, D. (1975): Class Structure in a Capitalist Society and the Theory of Residential Differentation. Heinemann London.
- Hauser, R. M., P. J. Dickinson, H. P. Travis, and J. N. Koffel (1975): "Structural changes in occupational mobility among men in the United States," *American Sociological Review*, pp. 585–598.
- HAZAN, M., AND B. BERDUGO (2002): "Child labour, fertility, and economic growth," *The Economic Journal*, 112(482), 810–828.
- HAZELL, P. B., C. POULTON, S. WIGGINS, AND A. DORWARD (2007): The future of small farms for poverty reduction and growth, vol. 42. Intl Food Policy Res Inst.
- Headley, Z. E. (2013): "Nommer la caste,".
- HEATH, A. F., AND R. JEFFERY (2010): Diversity and change in modern India: economic, social and political approaches. Oxford University Press.
- Heinrich, S. A., and F. Landy (1995): "Le barbier et ses clients: Usages diversifiés des codes culturels et permanence de l'Inde rurale," Études rurales, pp. 6–22.
- HEUZÉ, G. (1989): Ouvriers d'un autre monde: l'exemple des travailleurs de la mine en Inde contemporaine. Les Editions de la MSH.
- HEYER, J. (1989): "Landless agricultural labourers' asset strategies," *IDS Bulletin*, 20(2), 33–40.
- ——— (2009): "11 The marginalisation of Dalits in a modernising economy," The Comparative Political Economy of Development, p. 225.

———— (2016): "Loosening ties of patriarchy in agrarian transition in Tamil Nadu," *Critical Perspectives on Agrarian Transition: India in the global debate*, p. 199.

- HEYER, J., ET AL. (2000): "The changing position of agricultural labourers in villages in rural Coimbatore, Tamil Nadu, between 1981/2 and 1996," Queen Elizabeth House Oxford Working Paper Series, (57), 27.
- HEYER, J., AND N. G. JAYAL (2009): The challenge of positive discrimination in India. Centre for Research on Inequality, Human Security and Ethnicity, University
- HIDAY, V. A. (1978): "Migration, urbanization, and fertility in the Philippines," *International Migration Review*, 12(3), 370–385.
- HIMANSHU, H., P. LANJOUW, A. MUKHOPADHYAY, AND R. MURGAI (2011): "Non-farm diversification and rural poverty decline: A perspective from Indian sample survey and village study data,".
- HIMANSHU, H., AND N. STERN (2011): "India and an Indian village: 50 years of economic development in Palanpur,".
- HOUT, M. (1988): "More universalism, less structural mobility: The American occupational structure in the 1980s," *American Journal of sociology*, 93(6), 1358–1400.
- HUSSAIN, A., P. LANJOUW, AND N. STERN (1994): "Income inequalities in China: Evidence from household survey data," World Development, 22(12), 1947–1957.
- IVERSEN, V., AND P. RAGHAVENDRA (2006): "What the signboard hides: Food, caste and employability in small South Indian eating places," *Contributions to Indian sociology*, 40(3), 311–341.
- Jackson, J. A. (1968): Social stratification. Cambridge UP.
- JAFFRELOT, C., AND J. NAUDET (2013): Justifier l'ordre social. Caste, race, classe et genre. France (Presses universitaires de).
- JEFFREY, C. (2001): "'A fist is stronger than five fingers': caste and dominance in rural north India," *Transactions of the Institute of British Geographers*, 26(2), 217–236.

JEFFREY, C., P. JEFFERY, AND R. JEFFERY (2005): "Reproducing difference? Schooling, jobs, and empowerment in Uttar Pradesh, India," World Development, 33(12), 2085–2101.

- Jha, P. (2015): "8 Labour conditions in rural India: reflections on continuity and change," in *Rural Wage Employment in Developing Countries*, pp. 227–251. Routledge.
- Jha, P., et al. (2016): The changing village in India: Insights from longitudinal research. Oxford University Press.
- JODHKA, S. (2003): "Agrarian structures and their transformations," The Oxford India Companion to Sociology and Social Anthropology, 2.
- JODHKA, S. (2014a): Caste in Contemporary India. Taylor & Francis.
- JODHKA, S. (2018a): "Rural change in times of 'distress'," *Economic and Political Weekly*, 53(26), 5–7.
- JODHKA, S. S. (1994): "Agrarian changes and attached labour: emerging patterns in Haryana agriculture," *Economic and Political Weekly*, pp. A102–A106.
- ——— (1998): "From "book view" to "field view": Social anthropological constructions of the Indian village," Oxford development studies, 26(3), 311–331.
- ——— (2002): "Nation and village: Images of rural India in Gandhi, Nehru and Ambedkar," *Economic and Political Weekly*, pp. 3343–3353.
- ———— (2010): "Dalits in business: Self-employed scheduled castes in North-West India," *Economic and Political Weekly*, pp. 41–48.
- ——— (2012): Village society. Orient Blackswan.
- ——— (2014b): "Caste and Power in the Lands of Agri-Culture. Revisiting Rural North-West India," .
- ———— (2015): "Caste: why does it still matter?," in *Routledge Handbook* of *Contemporary India*, pp. 259–271. Routledge.
- ——— (2016): "Ascriptive hierarchies: Caste and its reproduction in contemporary India," *Current Sociology*, 64(2), 228–243.
- ——— (2018b): "Villages and Villagers in Contemporary India," *Critical Themes in Indian Sociology*, p. 77.

JODHKA, S. S., AND A. KUMAR (2007): "Internal classification of Scheduled castes: the Punjab story," *Economic and Political Weekly*, pp. 20–23.

- Jodhka, S. S., and A. Kumar (2017): "Non-farm economy in Medhubani, Bihar," .
- JODHKA, S. S., AND J. NAUDET (2019): Mapping the Elite: Power, Privilege, and Inequality. Oxford University Press.
- Jodhka, S. S., and K. Newman (2007): "In the name of globalisation: Meritocracy, productivity and the hidden language of caste," *Economic and Political Weekly*, pp. 4125–4132.
- Jodhka, S. S., and A. Prakash (2011): "Indian middle class: emerging cultures of politics and economics,".
- JOSHI, B., P. LANJOUW, ET AL. (2016): "Non-farm diversification, inequality and mobility in Palanpur," *Economic and Political Weekly*, 51(26-27), 43–51.
- JOSHI, P. C. (1975): Land reforms in India: Trends and perspectives. Allied Publishers New Delhi.
- KABA, A. (2014): "A Culture of Precarious Labour? Becoming a Day Labourer in India," *Autrepart*, (3), 157–173.
- ———— (2018): "Les maîtres du fer: des ouvriers métallurgistes de Bhopal et de leur confrontation avec l'incertitude," Ph.D. thesis, Paris, EHESS.
- Kaufmann, V. (2014): "Mobility as a Tool for Sociology," *Sociologica*, 8(1), 0–0.
- Kennedy, R., C. Riquier, and B. Sharp (1996): "Practical applications of correspondence analysis to categorical data in market research," *Journal of Targeting Measurement and Analysis for Marketing*, 5, 56–70.
- KERR, C., F. H. HARBISON, J. T. DUNLOP, AND C. A. MYERS (1960): "Industrialism and industrial man," *Int'l Lab. Rev.*, 82, 236.
- KHAN, S. R. (2006): "Learning from South Asian 'Successes' Tapping Social Capital," South Asia economic journal, 7(2), 157–178.
- KIJIMA, Y., AND P. LANJOUW (2005): "Economic diversification and poverty in rural India," *Indian Journal of Labour Economics*, 48(2), 349–374.

KNOKE, D., P. J. BURKE, AND P. J. BURKE (1980): Log-linear models, vol. 20. Sage.

- KOLENDA, P. (1978): Caste in contemporary India: Beyond organic solidarity. Benjamin/Cummings Menlo Park, CA.
- ——— (1987): Regional differences in family structure in India. Jaipur: Rawat Publications.
- ———— (2003): Caste, Marriage, and Inequality: Essays on North and South India. Rawat Publications.
- Krishnaji, N. (1984): "Family size, levels of living and differential mortality in rural India: some paradoxes," *Economic and Political Weekly*, pp. 248–258.
- Kumar, A., S. Kumar, D. K. Singh, et al. (2011): "Rural employment diversification in India: Trends, determinants and implications on poverty," *Agricultural Economics Research Review*, 24(conf), 361–372.
- Kumar, S., A. Heath, and O. Heath (2002a): "Changing patterns of social mobility: Some trends over time," *Economic and Political Weekly*, pp. 4091–4096.
- ——— (2002b): "Determinants of social mobility in India," *Economic and Political Weekly*, pp. 2983–2987.
- Kundu, A. (2007): "Migration and urbanisation in India in the context of poverty alleviation," in *international conference and workshop on Policy Perspectives on Growth, Economic Structures and Poverty Reduction, Beijing, China*, pp. 3–9.
- Lal, S. K., et al. (1982): "Sociological perspectives of land reforms," in All-India Seminar on Sociological Perspectives of Land Reforms (1980: University of Jodhpur). Agricole Publishing Academy.
- LANDY, F. (1994): Paysans de l'Inde du Sud: le choix et la contrainte. KARTHALA Editions.
- LANDY, F., AND J.-L. RACINE (1997): "Croissance urbaine et enracinement villageois en Inde," Espace Populations Sociétés, 15(2), 173–184.
- LANDY, F., AND A. VARREL (2015): L'Inde: du développement à l'émergence. Armand Colin.

Lanjouw, J. O., and P. Lanjouw (2001): "The rural non-farm sector: issues and evidence from developing countries," *Agricultural economics*, 26(1), 1–23.

- Lanjouw, P., and R. Jayaraman (1999): The Evolution of Poverty and Inequality in Indian Villages. The World Bank.
- LANJOUW, P., AND J. O. LANJOUW (1999): Rural nonfarm employment: A survey. The World Bank.
- LANJOUW, P., AND R. MURGAI (2009): Poverty decline, agricultural wages, and non-farm employment in rural India: 1983-2004. The World Bank.
- Lanjouw, P., R. Murgai, and N. Stern (2013): Non-farm diversification, poverty, economic mobility and income inequality: A case study in village India. The World Bank.
- LANJOUW, P., AND M. RAVALLION (1995): "Poverty and household size," *The economic journal*, 105(433), 1415–1434.
- Lanjouw, P., and A. Shariff (2004): "Rural non-farm employment in India: Access, incomes and poverty impact," *Economic and Political Weekly*, pp. 4429–4446.
- LANJOUW, P., AND N. STERN (1991): "Poverty in Palanpur," The World Bank Economic Review, 5(1), 23–55.
- LANJOUW, P., AND N. STERN (1993): "Agricultural change and inequality in Palanpur, 1957-84," *The Economics of Rural Organization: Theory, Practice and Policy*, pp. 543-568.
- Lanjouw, P., N. Stern, et al. (1998): "Economic development in Palanpur over five decades," *OUP Catalogue*.
- LEACH, E. R. (1971): Aspects of caste in south India, Ceylon and North-west Pakistan, no. 2. CUP Archive.
- LENSKI, G. E. (2013): Power and privilege: A theory of social stratification. UNC Press Books.
- LEVINE, N. (1977): The Nyinba, population and social structure in a polyandrous society. University of Rochester.
- LI, P. (2013): Handbook on social stratification in the BRIC countries: Change and perspective. World Scientific.

LIN, N. (2008): "A network theory of social capital," The handbook of social capital, 50(1), 69.

- LINDT, B. (2013): "Towards a comprehensive model of caste," *Contributions to Indian sociology*, 47(1), 85–112.
- Long, J., and J. Ferrie (2013): "Intergenerational occupational mobility in Great Britain and the United States since 1850," *American Economic Review*, 103(4), 1109–37.
- Luciano, G. (1978): "Dizionario di sociologia,".
- Luijkx, R. (2007): "Intergenerational mobility: Methods of analysis," *The Blackwell encyclopedia of sociology*, pp. 1–7.
- MADAN, T. N. (1989): Family and kinship: A study of the Pandits of rural Kashmir. Oxford University Press, USA.
- MANDELBAUM, D. G. (1974): Human fertility in India: Social components and policy perspectives. Univ of California Press.
- MARRIOTT, M. (1958): "Caste ranking and community structure in five regions of India and Pakistan," Bulletin of the Deccan College Research Institute, 19(1/2), 31–105.
- MARX, K., AND F. ENGELS (1848): "THE COMMUNIST MANIFESTO," Selected Works bu Karl Marx and Frederick Engels. Neu York: International Publishers, 1363.
- MAYER, P. (1993): "Inventing village tradition: the late 19th century origins of the north Indian 'jajmani system'," *Modern Asian Studies*, 27(2), 357–395.
- McIntosh, J., and M. D. Munk (2009): "Social class, family background, and intergenerational mobility," *European Economic Review*, 53(1), 107–117.
- MEDICK, H. (1976): "The pro to-industrial family economy: The structural function of household and family during the transition from peasant society to industrial capitalism," Social history, 1(3), 291–315.
- Mehta, A. K., and A. Shah (2003): "Chronic poverty in India: Incidence, causes and policies," World Development, 31(3), 491–511.

MICHIELS, S. (2016): "Modernisation, marchés du travail et circulation en Inde: Une approche mixte et multi-scalaire des migrations de travail," Ph.D. thesis.

- MILLAR, J., AND A. WARMAN (1996): "Family obligations in Europe,".
- MILLER, D. (1986): "Exchange and Alienation in the" Jajmani" System," Journal of anthropological research, 42(4), 535–556.
- MOHANAN, P. (2008): "Differentials in the rural-urban movement of workers," The Journal of Income and Wealth, 30(1), 59–67.
- Mohapatra, P., and J. Breman (2009): "India's Unfree Workforce: of bondage old and new," .
- Mosse, D. (2018): "Caste and development: Contemporary perspectives on a structure of discrimination and advantage," World Development, 110, 422–436.
- Mosse, D., S. Gupta, and V. Shah (2005): "On the margins in the city: adivasi seasonal labour migration in western India," *Economic and Political weekly*, pp. 3025–3038.
- Mukhia, H. (1981): "Was there feudalism in Indian history?," *The Journal of Peasant Studies*, 8(3), 273–310.
- Mukhopadhyay, A. (2011): "Stepping out of Palanpur: employment outside Palanpur,".
- Munshi, K. (2016): "Caste networks in the modern Indian economy," in *Development in India*, pp. 13–37. Springer.
- Munshi, K., and M. Rosenzweig (2006): "Traditional institutions meet the modern world: Caste, gender, and schooling choice in a globalizing economy," *American Economic Review*, 96(4), 1225–1252.
- ——— (2009): "Why is mobility in India so low? Social insurance, inequality, and growth," Discussion paper, National Bureau of Economic Research.
- Murdock, G. P. (1949): "Social structure.,".
- NAGARAJAN, R., AND S. KRISHNAMOORTHY (1992): "Landholding and fertility relationship in a low-fertility agricultural community in Tamil Nadu.,".

NAGESH, H. (1981): "Forms of un-free labour in Indian agriculture," *Economic and Political Weekly*, pp. A109–A115.

- NAUDET, J. (2018): Stepping into the Elite: Trajectories of Social Achievement in India, France, and the United States. Oxford University Press.
- OLDENBURG, P. (1992): "Sex ratio, son preference and violence in India: A research note," *Economic and Political Weekly*, pp. 2657–2662.
- Oommen, T. (1975): "Impact of green revolution on the weaker sections," in Changing Agrarian Relations in India; Papers and Proceedings of Seminar.
- ——— (1984): "Agrarian Classes and Political Mobilization in India," Sociological Bulletin, 33(1-2), 39–62.
- OSELLA, F., F. CAROLINE, AND C. OSELLA (2000): Social mobility in Kerala: modernity and identity in conflict. Pluto Press.
- OSELLA, F., AND C. OSELLA (1999): "From transience to immanence: consumption, life-cycle and social mobility in Kerala, South India," *Modern Asian Studies*, 33(4), 989–1020.
- ÖZDEMIR, T., AND E. EYDURAN (2005): "Comparison of Chi-Square and likelihood ratio Chi-Square tests: Power of test," *Journal of Applied Sciences Research*, 1(2), 242–244.
- PAL, P., AND J. GHOSH (2007): "Inequality in India: A survey of recent trends,".
- Panichella, N. (2014): Meridionali al Nord: migrazioni interne e società italiana dal dopoguerra ad oggi. il Mulino.
- PANINI, M. (1996): "The political economy of caste," Caste: Its twentieth century avatar, pp. 28–68.
- PARRY, J. P. (2008): "The sacrifices of modernity in a Soviet-built steel town in central India," On the margins of religion, pp. 233–262.
- ——— (2013): Caste and kinship in Kangra, vol. 4. Routledge.
- PARRY, J. P., J. BREMAN, AND K. KAPADIA (1999): "The worlds of Indian industrial labour," *Contributions to Indian sociology*, 33(1-2).
- PATNAIK, U. (1976): "Class differentiation within the peasantry: an approach to analysis of Indian agriculture," *Economic and Political Weekly*, pp. A82–A101.

PATTENDEN, J. (2016): Labour, state and society in rural India: A class-relational approach. Manchester University Press.

- PLATT, L. (2005): "The intergenerational social mobility of minority ethnic groups," *Sociology*, 39(3), 445–461.
- POLANYI, K., AND R. M. MACIVER (1944): The great transformation, vol. 2. Beacon press Boston.
- PORTES, A. (2014): "Downsides of social capital," *Proceedings of the National Academy of Sciences*, 111(52), 18407–18408.
- Pouchepadass, J. (1980): "Peasant classes in twentieth century agrarian movements in India," Peasants in history, essays in honour of Daniel Thorner, edited by EJ Hobsbawm.
- PRADHAN, K. (2013): "New census towns of India: unacknowledged urbanisation. Econ," *Political Weekly*, 48(36), 3–51.
- PUTNAM, R. D. (1995): "Bowling alone: Americas declining social capital." journal of Democracy 6: 65-78," 379.
- Racine, J.-L. (1997): Peasant moorings. Sage Publications.
- Raheja, G. G. (1988): The poison in the gift: ritual, prestation, and the dominant caste in a north Indian village. University of Chicago Press.
- RAM, M., AND R. WONG (1994): "Covariates of household extension in rural India: Change over time," *Journal of Marriage and the Family*, pp. 853–864.
- RANJAN, S. (2008): "Determinants of Rural Non-Farm Employment: Microlevel Evidence from Uttar Pradesh," *Social Scientist*, pp. 22–50.
- ———— (2009): "Growth of rural non-farm employment in Uttar Pradesh: Reflections from recent data," *Economic and Political Weekly*, pp. 63–70.
- RAWAL, V. (2008): "Ownership holdings of land in rural India: Putting the record straight," *Economic and Political Weekly*, pp. 43–47.
- REEVES, P. (1991): Landlords and Governments in Uttar Pradesh: A study of their relations until zamindari abolition. Oxford University Press, USA.
- SANDERS, J., V. NEE, AND S. SERNAU (2002): "Asian immigrants' reliance on social ties in a multiethnic labor market," *Social Forces*, 81(1), 281–314.

- Saunders, P. (2006): Social class and stratification. Routledge.
- SAVAGE, M. (1988): "The missing link? The relationship between spatial mobility and social mobility," *British Journal of Sociology*, pp. 554–577.
- SCHIZZEROTTO, A. (1993): "Problemi concettuali e metodologici nell'analisi delle classi sociali,".
- SCHUTJER, W. A., C. S. STOKES, AND J. R. POINDEXTER (1983): "Farm size, land ownership, and fertility in rural Egypt," *Land Economics*, 59(4), 393–403.
- SCOTT, J., AND G. MARSHALL (2009): A dictionary of sociology. OUP Oxford.
- SEN GUPTA, J.-D. (2011): "Appariement sur le marché du travail et filière migratoire en Inde: le cas des ouvriers du bâtiment," Ph.D. thesis, Lille 1.
- SHAH, A. (2006): "The labour of love: Seasonal migration from Jharkhand to the brick kilns of other states in India," *Contributions to Indian Sociology*, 40(1), 91–118.
- SHARMA, H. (1994a): "Distribution of landholdings in rural India, 1953-54 to 1981-82: Implications for land reforms," *Economic and Political weekly*, pp. A12–A25.
- ——— (2007): "Land distribution and tenancy among different social groups," *Economic and Political Weekly*, pp. 4183–4185.
- SHARMA, K. (1976): "Power elite in rural India: Some questions and clarifications," *Sociological Bulletin*, 25(1), 45–62.
- SHARMA, K. L. (1994b): Social stratification and mobility. Rawat Publications.
- SHAVIT, Y., AND H.-P. BLOSSFELD (1993): Persistent Inequality: Changing Educational Attainment in Thirteen Countries. Social Inequality Series. ERIC.
- SINGH, A. (2006): "Labor mobility in China and India: the role of Hukou, caste, and community," *Learning From Each Other*, p. 241.
- SINGH, D. (1998): "Internal migration in India: 1961–1991," Demography India.

SINGH, Y. (1977): "The changing pattern of social stratification in India," *Dimensions of Social Change in India (New Delhi: Allied Publishers, 1977)*.

- SINHA, G. S., AND R. C. SINHA (1967): "Exploration in caste stereotypes," *Social Forces*, 46(1), 42–47.
- SOROKIN, P. A. (1959): "Social and cultural mobility," New York, 4, 99–145.
- SOROKIN, P. A. (1998): Social mobility, vol. 3. Taylor & Francis.
- SRINIVAS, M. N. (1959): "The dominant caste in Rampura," American anthropologist, 61(1), 1–16.
- ——— (1980): The remembered village, no. 26. Univ of California Press.
- ——— (1995): Social change in modern India. Orient Blackswan.
- SRIVASTAVA, R., AND S. BHATTACHARYYA (2003): "Globalisation, reforms and internal labour mobility: analysis of recent Indian trends," *Labour and Development*, 9(2), 31–55.
- SRIVASTAVA, R. S. (2016): "Myth and reality of labour flexibility in India," *The Indian Journal of Labour Economics*, 59(1), 1–38.
- START, D. (2001): "The rise and fall of the rural non-farm Economy: Poverty Impacts and Policy options," *Development policy review*, 19(4), 491–505.
- START, D., AND C. A. JOHNSON (2004): Livelihood options?: The political economy of access, opportunity and diversification. Overseas Development Institute London.
- STOKES, C. S., AND W. A. SCHUTJER (1984): Access to land and fertility in developing countries. Macmillan.
- STRAUSS, J., AND D. THOMAS (1995): "Human resources: Empirical modeling of household and family decisions," *Handbook of development economics*, 3, 1883–2023.
- Sundar, N., R. Guha, and J. Parry (1999): "The Indian census, identity and inequality," *Institutions and Inequalities: Essays in Honour of Andre Beteille*, p. 100.
- SWARTZBERG, L. (1979): The north Indian peasant goes to market. Motilal Banarsidass Publishe.

Tambs-Lyche, H. (2017): Transaction and Hierarchy: Elements for a Theory of caste. Routledge.

- TELTUMBDE, A. (2017): "Foreword: Dalits, Dalit women and the Indian State," in *Dalit Women*, pp. 53–74. Routledge India.
- THORNER, D. (1956): "India's Agrarian Revolution by Census Redefinition," *Indian Economic Review*, 3(2), 1–21.
- TILLY, C., ET AL. (1998): Durable inequality. Univ of California Press.
- Tosi, S., and T. Vitale (2016): "Modernizzazione, agire di comunità e azione collettiva: alle radici della political economy urbana," *Stato e mercato*, 36(2), 241–272.
- TREIMAN, D. J. (1970): "Industrialization and social stratification," Sociological inquiry, 40(2), 207–234.
- TRIVENTI, M., N. PANICHELLA, G. BALLARINO, C. BARONE, AND F. BERNARDI (2016): "Education as a positional good: Implications for social inequalities in educational attainment in Italy," *Research in Social Stratification and Mobility*, 43, 39–52.
- URRY, J. (2005): Sociologie des mobilités: une nouvelle frontière pour la sociologie? Armand Colin.
- VAID, D. (2012): "The caste-class association in India: an empirical analysis," Asian Survey, 52(2), 395–422.
- ——— (2014a): "Caste in contemporary India: Flexibility and persistence," Annual Review of Sociology, 40, 391–410.
- ——— (2014b): "Class and Social Mobility," in Seminar, vol. 663.
- ——— (2016): "Patterns of social mobility and the role of education in India," Contemporary South Asia, 24(3), 285–312.
- Vaid, D., and A. Heath (2010): "Unequal opportunities: Class, caste and social mobility,".
- Vallet, L.-A. (2001): "Forty years of social mobility in France: Change in social fluidity in the light of recent models," *Revue française de sociologie*, pp. 5–64.
- VLASSOFF, C. (1990): "The value of sons in an Indian village: How widows see it," *Population studies*, 44(1), 5–20.

Wadley, S. S. (1994): Struggling with destiny in Karimpur, 1925-1984. Univ of California Press.

- WEBER, M. (1958): "The Religion of India: The Sociology of Hinduism and Buddhism, trans," *HH Gerth and Don Martindale (Glencoe, Ill.: The Free Press, 1958)*, p. 207.
- ——— (1978): Economy and society: An outline of interpretive sociology, vol. 1. Univ of California Press.
- Weber, M., S. Mezzadra, and F. Ferraresi (2015): Dalla terra alla fabbrica: scritti sui lavoratori agricoli e lo Stato nazionale (1892-1897). Gius. Laterza & Figli Spa.
- WEEDEN, K. A., AND D. B. GRUSKY (2005): "The case for a new class map," *American Journal of Sociology*, 111(1), 141–212.
- Wellman, B. (1983): "Network analysis: Some basic principles," *Sociological theory*, pp. 155–200.
- Whimster, S. (2004): The essential Weber: A reader. Routledge.
- WISER, W. H. (1958): The Hindu jajmani system: A socio-economic system interrelating members of a Hindu village community in services. Lucknow Publishing House Lucknow.
- WITSOE, J. (2017): "Poverty and the Quest for Life: Spiritual and Material Striving in Rural India. By Bhrigupati Singh," *Pacific Affairs*, 90(3), 618–619.
- WRIGHT, E. O. (1980): "Class and occupation," Theory and Society, 9(1), 177–214.
- ———— (1989): "The comparative project on class structure and class consciousness: An overview," *Acta Sociologica*, 32(1), 3–22.
- ———— (1995): "What is analytical Marxism?," in *Rational Choice Marxism*, pp. 11–30. Springer.
- ——— (2000): "Foundations of Class Analysis,".
- ——— (2015): Understanding class. Verso Books.
- XIE, Y., AND A. KILLEWALD (2013): "Intergenerational occupational mobility in Great Britain and the United States since 1850: Comment," *American Economic Review*, 103(5), 2003–20.