# COOPERATIVE STRATEGIES AND VALUE CREATION IN SUSTAINABLE FOOD SUPPLY CHAIN

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### INTEGRATED FOOD SUPPLY CHAINS: THE CASE OF VARIETY CLUBS IN THE FRUIT SECTOR

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#### 1. Introduction

The "club" system represents the realization of a novel organizational model for the provision of goods and services, in accordance with principles theorized by Buchanan (1965). Concretely, it consists of a voluntary-basis aggregation of manifold subjects, who are ensured to get exclusive benefits from their membership condition. Over the last decades, such a model has been implemented in the agro-food branch, particularly in the fruit sector, hampered by multiple conditions. Its spreading is here motivated by the chances it offers to overcome a scarcer competitiveness. Market globalisation, price competition, overproduction, lack of innovation, consumers' expectations for quality products have altogether urged for an economic reorganization of the entire fruit supply chain. In this regard, the so-called "variety club" allows the sector to take advantage from an innovative organization, based upon a strongly integrated and coordinated approach amongst actors. Unlike other forms of integrated chains, it is rather qualified as an overstructure made up of subjects who operate under formal contracts to be exclusively licensed for the use of a patented fruit brand. Whilst for other commodities chain contracts turned out to be ineffective, the fruit sector expects to take advantages from the club model thanks to (i) controlled supplied quantities, (ii) product differentiation, (iii) higher remunerations, (iv) response to consumers' demand for quality and appealing fruits, (v) facilitatation and government of price formation along the chain. Moreover, the possibility of joining the club for both individuals and their associations

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highlights the linkages with all the interventions promoting food chain integration and cooperation between operators.

#### 2. Methodological approach

Up to now, the scientific debate about variety clubs is largely focussed on the fruit species, its genetic selection, biology and protection; very scant evidences depict their actual internal organisation and economic implications. This topic still preminently remains of current knowledge amongst experts, and not adequately communicated to general public, nor addressed by academia. Starting from the considerations arisen from a literature review, the study at hand is a concept paper, aimed at better investigating the composition of variety clubs. Particularly, it elucidates various subjects who take part in a typical club model, explores strength relationships amongst them and sheds light on their bargaining power.

#### 3. Results and discussion

The creation of a variety club relies upon a patented fruit, which use of permission is released to club members by means of formal contracts. This way, patent-holder defines roles and tasks to be performed by each subject, sets clear rules to which signatories are subordinate, holds efficient control over the supply chain. Exclusivity involves propagators, producers and/or their associations; entrusting one or few large retail distributors is also possible, even with uncertain and contrasting results. Licensed exclusivity is granted to signatories on the payment of membership fee and royalties, which cover club administration and management expenses. Such elements represent additional costs for involved actors lasting for the entire duration of the contract and may markedly impact on their annual budgets.

The coordinator commissiones nurseries to propagate a pre-defined number of plants, with no possibility of an extra-propagation without its agreement. Plant material is to be conferred only to fruit-growers members of the club, who assure product placement. This may favour the diversification of both nurseymen's supply and income source; however, no additional margins can be obtained on the sale price to fruit growers, since this element is set by the coordinator.

Likewise, fruit-growers are burdened with the costs of joining the club. Despite this, the introduction of patented varieties into the production pattern

may create additional revenues and enable producers to differentiate their supply. At the same time, innovative products can find a collocation on a stable market. Nontheless, fruit-growers seem to be the weakest subjects of the entire model. Their decision-making capabilities and rooms of manoeuvre are strongly constrained by multi-year production contracts and mediumlong term investment: an arranged number of plants is provided, at a predetermined selling price, to be conducted in a precise area and aimed at a quality production, without the possibility of influencing quality criteria. The involvement of a producer organization would, instead, enforce the bargaining power, either when arranging contracts or managing post-harvest activities.

Also commercialization and marketing-related services must be operated by structures and centres members of the club. They can be entrusted either to specific companies or to cooperatives of producers, who are the exclusive licensees of marketing rights. In the latter case, they take care of promotional activities and coordinate and control the production process, from production programs to the set of various standards. This is, indeed, the last step of the food chain operated within the club structure.

It is noteworthy that other subjects are engaged in economic transactions with the club, without being members. It is this the case of distributors entrusted as exclusive licensors. In most cases, variety club addresses large retail distribution because of the collection and purchase of larger amounts of product. Retailers are charged with the distribution of fruit variety as fresh product, while under-quality fruit and non-usable wastes can be processed and still commercialized without indications of the registered trademark. Advertisement and promotion activities are emphasized to obtain price *premia* from final consumers, and ensure higher returns to both patent holders and fruit-growers.

The vertical integration of variety clubs is to be considered a valid solution for strengthening the fruit sector, rather than the best solution ever. In fact, though all motivated by common and utilitaristic purposes, t potential club members combines in a large array of management schemes, levels of arrangement, control and forms in between. Therefore, neither a unique reference model nor an optimal structure per sè can be easily identified. The present contribution provides first evidences in this sense and aims at being a further stimulus to pursue research in this direction. More efforts should also be put into deepening role and motivations of actors, utilities benefitted and value chain analyses, which are still unexplored. Such approaches are at least needed to verify the economic convenience of joining the club and identify bottlenecks that limit the efficiency of the model.

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