

first conducted a feasibility study and a market survey. In December 2014 started, on EC funding, the project AWARE (Action of Women in Agribusiness for a new Regional Economy), combining the economic empowerment of women to dialogue between the Albanian and Serbian communities; the focus was the creation of a short chain of pork that guarantees quality products, recovery of local traditions and environmental sustainability of economic development.

UNIMORE has been involved in the organization of training modules direct both to breeders and to the local veterinary staff: the topics were the management, breeding facilities, nutrition, the use of local resources, slaughtering techniques, meat processing, and fight against diseases.

The breeding facilities owned by the members, in poor condition because of poverty and/or war, have been renovated or constructed *de novo* according to a standard model, adapted to the different situations. The main stage of the project was the design, construction and start-up of a modern slaughtering and meat processing plant. The project has also included exchanges with Italian companies active in the pigmeat sector. The small farms of members have a total of 24 sows and 220 growing pigs. The slaughterhouse works 10 pigs/week on average, producing fresh meat and processed products that come from a happy union between the Kosovar and the Emilian tradition.

This presentation reports the stages of the project: training, renovation and characteristics of the piggeries, construction and operation of the slaughterhouse, creation of a manual of correct farming practices and production rules.

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Survey on dairy farmer use and interest for precision livestock farming tools

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The precision livestock farming (PLF) approach, the use of information and technologies to improve animal health, welfare, and farm efficiency, is a developing area of great scientific and commercial interest. To understand the current PLF tool adoption in Italian dairy farms and to analyse the perception of farmers of the importance of technologies, a survey was

carried out in the Cremona province, for its economic importance in dairy industry. The technicians of Provincial Breeder Association (APA) of Cremona interviewed 490 farmers from July to September 2016 to collect information on: 1) farm extent, herd size (HS), average effective milk yield (EMY) and number of employed workers (EW); 2) presence of technologies for monitoring production, reproduction, health, and feeding parameters or interest for using them; 3) importance of criteria considered for evaluating possible investment in PLF tools (assigning a score from 1, not important, to 5, very important). Chi-squared analyses were performed using the FREQ procedure (SAS/STAT package) to compare differences in HS (<101, 101-200, >200 cows/herd: SHS, MHS and LHS), EMY (<9501, 9501-10500, >10500 kg/305 d: LMY, MMY and HMY), and cows to EW unit ratio (<33, 33-47, >47 cows/EW: LEW, MEW and HEW) categories (to obtain numerically comparable groups). About 93% of respondents were the owners of the farm; 23% of farmers were <40 year old and 41% were >51 year old. The most used and most interesting automatic systems were sensors to measure MY and cow activity (used by 41.2 and 48.6% of farmers, respectively) and to detect mastitis (used by 23.7% of farmers and interesting for 63.1%). The percentages of farms with automatic MY registration were 69.5% of LHS, 51.1% of HMY and 56.0% of HEW farms, while farmers that used sensors to detect oestrus were 73.8% of LHS, 64.2% of HMY and 61.7% of HEW. Sensors for automatic mastitis detection were present in 44.5% of LHS, 31.4% of HMY and 34.3% of HEW. Automated systems for monitoring rumination, milk composition and hoof health were poorly present, but highly interesting (>50%). The most important factors for considering PLF investments were the benefit to cost ratio (score 4.74 ± 0.64) and the availability of a well-functioning local assistance (score 4.67 ± 0.63). This survey suggests most of the dairy farmers have positive aptitude for MY recording as well as for technologies that detect oestrus and mastitis, better if well supported by a good local service and support.

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Milk quality and milking practices in dairy goat farms in Lombardy

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Aim of this work was to study the relationship between goat milk quality and milking management practices. The study was conducted on 148 dairy goat farms in Lombardy (Italy), with particular focus on milk somatic cell count (SCC) and milk fat/protein reversion syndrome. Direct interviews to the farmers were collected. Monthly bulk milk analyses in 1 year (fat, protein, casein and lactose percentages, somatic cell and standard plate count) were used for quality evaluation of goat milk.

Individual milk production was on average 1.26 ± 0.44 kg/d, collected during 1.94 ± 0.18 milkings a day. Average number of dairy goats was 74.3 ± 95.8 ; most of farms reared Alpine goats (38%), 36.5% Saanen, 16.3% Alpine and Saanen, and 9.2% local breeds. Milk quality was quite good ($3.52 \pm 0.73\%$ fat, $3.40 \pm 0.46\%$ protein, $2.62 \pm 0.40\%$ casein). Milking was performed on bedded area in 13.8% of farms, inside the barn in 53.6% and in a separate milking room in 32.6%.

A multiple correspondence analysis was performed and high correlations were found (the first two dimensions explained 31.5% of variance) among farms characterized by local breeds, small size (<45 dairy goats), no official milk recording, milking on bedded area, no udder cleaning before milking, no forestripping, no teat post-dipping and no use of gloves by milkers. High correlation was found among farms with Saanen and Alpine goats, large size (>70 dairy goats),

presence of official milk recording, milking inside the barn (but out of bedded area) or in a separate room, udder cleaning before milking, forestripping, teat post-dipping and use of gloves by milkers. A second multiple correspondence analysis was performed and high correlations were found among farms characterized by local breeds, low milk fat ($<3.5\%$) and low protein content ($<3.4\%$), milk for cheese processed by farmers, low content of SCC and standard count plate, probably due to a special care at milking for farm cheese making. On the other hand, high correlation was found among farms with Saanen and Alpine goats, large farm size (>70 dairy goats), high milk fat content, no milk fat/protein reversion syndrome and milk delivered to dairies, probably due to a special care in ration formulation and attention to milk quality. The study demonstrates the importance of milking and farming strategies to improve goat milk quality.

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