FREE-RANGE ORGANIC BREEDING SYSTEM

CASE STUDY FARM_IT_04

History farm

The farm_IT_04 1 is located in the north Italy, Lombardia. This area is characterised by a semi-continental climate, with relatively cold and wet winters and hot summers, but occasionally prone to thunderstorms. These unique climatic conditions allow they to enjoy green pastures for much of the year, allowing animals to graze sustainably for most of the seasons.

This is an organic, family-run farm with 20 hectares, 14 of property and 6 leased. In total



they have 13 employees. The main activity is the rearing of 120 goats of the Camosciata delle Alpi breed. In addition, 3 sows and their offspring, 150 laying hens, a lot of groups of other poultry during the year.

The farm also produce forage for hay and fresh grass, and, to offer new products to the consumers, a lot of kitchen gardens when we grow onions, potatoes, cabbages.



Pig rearing

The breed of pigs raised is white conventional, selected for its productivity. This brred infact is characterized by higher litter sizes, rapid growth rates, increased muscle mass, and reduced fat content.

Sows and piglets

After weaning, the sows are separated from the piglets, normally after 45-60 days. The sows then return to the service area for artificial insemination, while the piglets are moved to another paddock, generally in groups of about 12 pigs. During the growing and finishing phases, pigs are rotated between different paddocks in relation to live weight and paddock size. The housing used is small and easily movable huts.

This management offers high levels of health and welfare for the pigs, resulting in superior meat quality characterized by a darker color, richer flavor, and better consistency. However, it requires a significant amount of labor hours per pig.



Pasture menage and feeding

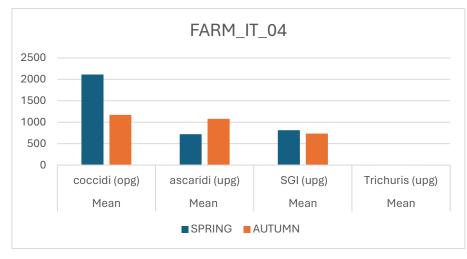
The paddock for weaners is completely bare and there are no trees. Only the paddock intended for finishing pigs is covered with wild trees, which provide shade for the pigs. The pigs' diet consists mainly of concentrate, initially acquired entirely when they are piglets, and then gradually moving on to include more self-produced cereals. Whey and bran from the farm's activities are also used in their diet.

Environmental aspects

While pigs can pose a challenge to soil health due to compaction, they also contribute to fertilisation. However, limited space in small paddocks can lead to rapid deterioration.

Economic aspects

The company maximises income from pig farming through the direct sale of sausages and other products. However, expansion is limited by park regulations that restrict the number of animals that can be raised. The main market for pork products is the direct sale of processed and cured products. The farm uses a symbiotic relationship between the species: the pigs consume the whey from the goats, which also attracts visitors, creating a positive marketing effect.

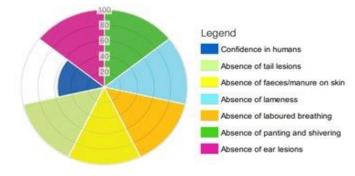


Parasities

Analysis of faecal samples collected between 2022 and 2023 reveals that parasite levels among animals are well managed. Slight seasonal variations in the presence of intestinal parasites are observed, particularly in Coccidae.

PIG LOW and welfare

The farm's pig farm enjoys excellent health, having never experienced any major health problems. To prevent problems, the pigs are provided with straw during the winter months and access t o wallow areas during the summer. Significantly, the farm has never



employed the use of drugs or deworming agents.

The farmer observes several advantages for the welfare of the pigs. These include ample paddock for movement, exposition to fresh air and contact with the ground. The pigs are able to express their natural behaviour, contributing to their general well-being. Furthermore, the farm has not recorded any major epidemics among its pigs, underlining the success of its approach to breeding and management.

Pig welfare is monitored regularly, including seasonal fecal sampling for parasite analysis. The PIGLOW application is utilized for assessing animal welfare, with parameters generally showing high scores except for trust towards humans, which improves over time as pigs become more familiar with human presence.

The graph illustrates the different parameters used to evaluate animal welfare in pig farming. High scores are evident for most of the parameters, except for one: trust towards humans. The pig, which is very inquisitive by nature, requires a certain amount of time to get close to humans. However, in this particular case, the animals did not seem frightened. After a few minutes of studying the situation, they showed increasing interest in humans, approaching them with curiosity.

Overall, the farm's approach combines sustainable practices with a focus on animal welfare and product quality, while having to confront challenges such as soil erosion and feed management.

TABLE FARM_IT_04

Free-range production system - FARM_IT_04	
Farm category	Organic
Number of sows	4 sows
Breed	white conventional
Food	Pasture and integration with cereal
Average farrowings per sow	
Farrowings per year	
% live born piglet mortality	
Mutilations	None
General health	The animals are in excellent health.
Weaning	After 45-60 days
Weight when sold on or slaughtered	After 11 month, 160 kg