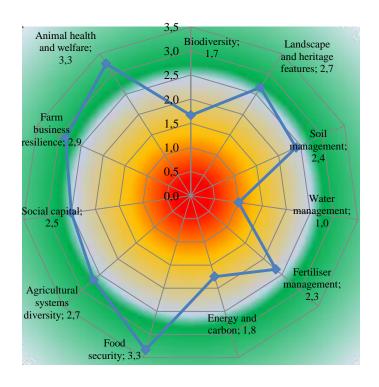
Sustainability assessment for the Greek case farm No.1



1. Biodiversity

The farm does not follow a pre-scheduled management plan for conservation and improving biodiversity. Four red list species and a rich flora have been reported on the farm. However, they have not been closely surveyed. The available permanent pasture is managed as "low input" and "very low input". About 60% of this land is woodland consisting of native species. Although, farm woodland is not managed at all and goats are not excluded from it, about 20% of the total land is used as wildlife habitat which is favored by the fact that there is no pest control carried out.

2. Landscape and heritage

There are no historic features present on the farm. The farm in general is well adapted to the natural environment but there are not any physical boundaries of environmental value. Skopelos breed reared by the farm belongs to the rare breeds of goats.

3. Soil management

A soil analysis has never been undertaken at the fields in the past. Goats turn out to grazing during winter throughout the day and remain housed in light construction shed only during rainy days. There has not been any significant damage on the soil from goats grazing during winter. Practically, the soil was not affected by erosion, which explains why no measures are taken to reduce the risk of erosion.

4. Water management

There is no specific water management plan in the farm. No actions are in place for water resource protection. However, water shortage is common during summer months. The shortage of water, particularly during summer months is the main obstacle for arable crops production in the island.

5. Fertiliser management and nutrients

The Nitrogen showed a surplus of 42 kg per ha. Phosphorus showed a slight surplus of 1 kg per ha, whereas the surplus of potassium was about 9 kg per ha. No artificial fertilizer is applied and the level of nutrient application needed for the crops is not determined by monitoring the level of major nutrients in the soil. Due to the extensive management scheme, the produced manure is not possible to be collected.

6. Energy and carbon

The farm does not have electricity on-farm and rarely uses a power generator. There is no recording of on-farm energy use and has not completed neither an energy audit nor a greenhouse gas assessment. Moreover, there are no renewable sources of energy, but the farmer has considered installing solar photovoltaic cells in the future.

7. Food security

Milk yield in the farm is well above average for the farm type. The total of the cheese and meat

produced is sold to the local market. Regarding feeds, only 35% of the total feed is bought in from off-farm, whereas the percentage of the total farm's feed being human edible is rather low (5-15%).

8. Agricultural systems diversity

The livestock system can be considered as a singlespecies and single-breed system. A local dairy goat breed is used. The herd is under a performance testing scheme with milk production recording and controlled matings. Two outlets are used for the marketing of the products which are produced by the milk processed on-farm.

9. Social capital

Two qualified family members and one worker run the farm. A farmer's market is available for the marketing of the products and as a mean of communication of these products with the public. Farmer and stuff are not exposed to hazardous chemicals and thus no training has been given.

10. Farm business resilience

Only some of the scheduled investments have been carried out in the farm but there are future perspectives of further development, as the farm makes a reasonable living and is expected to still be farmed for the next decade. The flexibility in the choice of both inputs and outputs is considered restricted and the capabilities to pick up and apply new knowledge and techniques, rather low. Benchmarking is used to compare farm's performance to that of farms with similar management schemes. However, the results of the benchmarking are not used for the better planning of the farm's management which is prescheduled by the farmer twice a year.

11. Animal health and welfare

The farm has a health plan which has been drawn up once and not reviewed regularly. The specific plan included strategies for maintaining good health and for the prevention of the diseases, but did not include management, feeding and monitoring strategies under a predesigned time scale. The value of spending for veterinary medicines and treatments was average compared to similar production systems. Lameness and mastitis incidence can be considered as low and moderate, respectively. Furthermore, together with production traits, disease prevention is also considered in breeding stock selection. In general, welfare of goats can be considered satisfying with goats enjoying the ability to perform natural behavior and grazing throughout the year with the exception of some days with bad weather conditions.