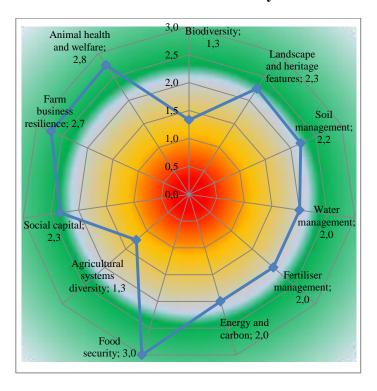
Sustainability assessment for the Greek case farm No.2



1. Biodiversity

There is no pre-scheduled management plan for conservation and improving biodiversity in the farm. Four red list species have been reported on the farm, which are not monitored. The total of permanent pasture is managed as "low input" and "very low input." Moreover, about 5% of the total land is used as wildlife habitat. No pest control is carried out in the farm.

2. Soil management

A soil analysis has never been undertaken at the fields in the past. Goats are grazing during winter for about 4-5 hours. A partial damage of grazing land, spread over a wide area, as well as 10-20% erosion of this land is observed. However, no measures are implemented in order to reduce the risk of erosion and run off.

3. Landscape and heritage

There are protected archaeological features on the common land used for grazing, which need restoration. The buildings are not in keeping with the surrounding area and there are no value boundaries on it.

4. Water management

There are no actions taken for water resource protection and overall management. Some of the crops are irrigated with the irrigation applications being modified in response to weather conditions. Although a water shortage during summer is sometimes observed, there is no water collection and extraction when necessary.

5. Fertiliser management and nutrients

The Nitrogen showed a surplus of 37 kg per ha. Phosphorus showed a slight deficit of about 0.5 kg per ha, whereas the surplus of potassium was about 1 kg per ha. Both artificial fertilizers and manure are used for crops. The nutrient application is determined on an ad-hoc basis. Manure is composted on field, but its' N, P, K content remains unknown.

6. Energy and carbon

The farm does not have electricity and rarely uses a power generator. There is no recording of on-farm energy use and the farm 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 on the average for the farm type. Dairy products, produced by the collaborating milking company, are sold in regional market. About 70% 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%). The farm has an organic certification.

8. Agricultural systems diversity

The livestock system can be considered as a single-species and single-breed system. A local dairy goat breed is used. There is no performance testing scheme. Moreover, one outlet is used for the marketing of the products. The farm does not grow any novel forages.

9. Social capital

Four qualified family members and one worker run the farm. In the past year, no farm visits have been held as the farmer does not encourage such practice, although he maintains some public access to the farm. Farmer and staff 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, as the farm during the last years is just surviving. However, the farmer and his sons expect to still be in business for the next years. The flexibility in the choice of both inputs and outputs is considered moderate 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 and the results are being used for the improvement of farm's management.

11. Animal health and welfare

The farm has a health plan which has been drawn up once, but it is not reviewed regularly. It included strategies for maintaining good health and for the prevention of the diseases. It also highlighted the most important problems on farm level. There is a clear need for updating the current plan. The spending at veterinary medicines and treatments was high compared to similar production systems. Lameness and mastitis incidence can be considered as low and high, respectively. In general, welfare of goats is

satisfying with the exception of somewhat restricted feeding.