



SustainFARM

Public Goods Tool

CASE STUDY: POLAND

Location

The farm is located in the Świerczów commune characterised by 64% of arable lands and 26% of forest. The main sectors in the area include construction, services, transport, agriculture and forestry. More than 50% of the commune farms are small farms between 1-5ha, with 18% between 5-10 ha, so many farmers are looking for new sources of income. Crop production includes wheat, barley, rye, rapeseed, buckwheat and vegetables, with some animal production (poultry, cattle, pigs) and fishery.

The farm

The farm consists of 25ha of orchards (apples, plum, pear, apricot) with some intercropping with vegetables, plus a 2ha silvopastoral system with horses. Many different vegetables are grown including tomatoes, paprika, cucumber, watermelons, lettuce, cabbage, herbs. The main products include a wide range of products from fruits and vegetables such as juices, syrups, marinades, processed vegetables, jams, salads and herbs; these are sold directly locally. The farm also has an agro-tourism activity and organises environmental education workshops. It is partially organic.



Figure 1. Fruit and vegetable agroforestry farm, Poland

Results

As a diverse organic fruit and vegetable farm, it scores highly across many of the spurs (Fig. 2) achieving a top score in landscape and heritage features (being very characteristic of the area and using heritage crop varieties) and agricultural systems diversity (with 29 different crop species being cultivated). Its lowest score is for governance, reflecting perhaps a lack of wider awareness of ethical issues (Fig. 3). The LER is 1.15 which suggests that 15% more land is needed under a monocropping scenario to achieve the same level of production (based on metabolizable energy) as the agroforestry system on the farm. The score for soil management indicate that less attention is paid to cultivation measures that protect the soil, although much area of the farm is covered by perennial vegetation. The energy benchmarking shows that the arable enterprise uses only half of arable benchmark systems, but that the domestic energy use is considerably higher than an average farmhouse (Fig. 4).

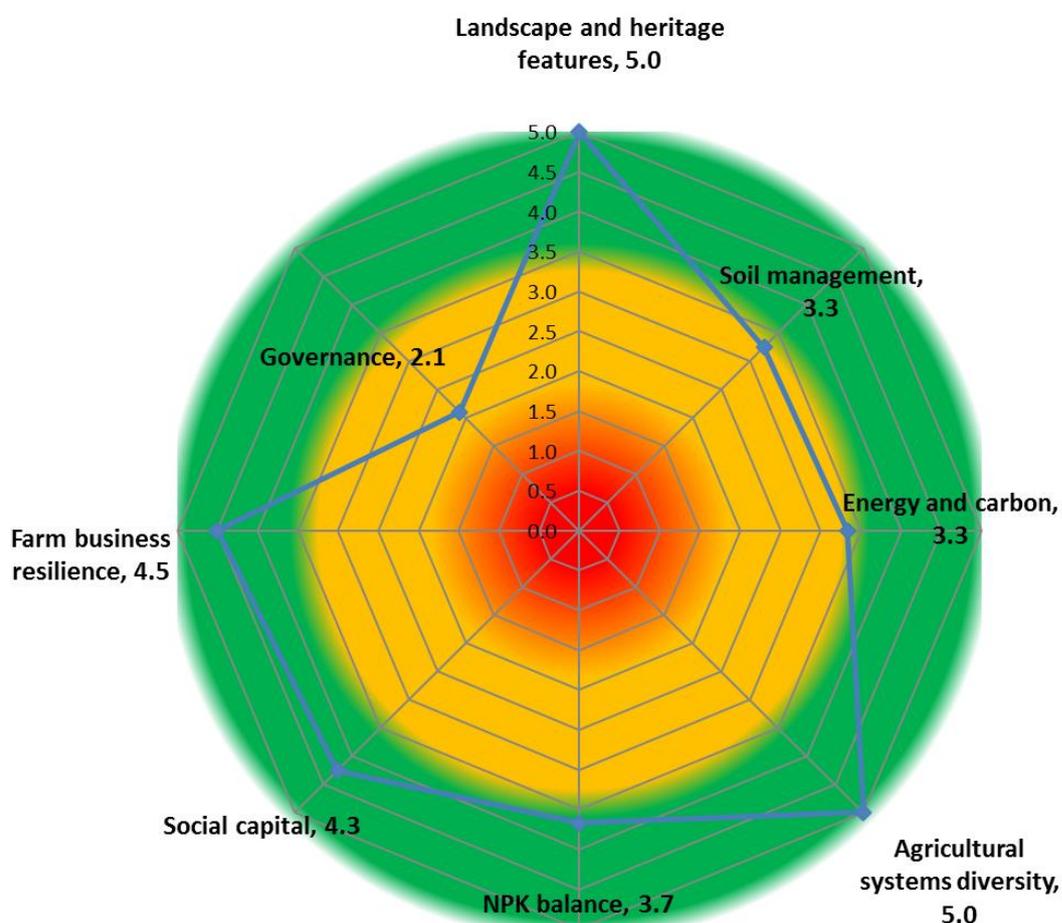


Figure 2. Spur scores



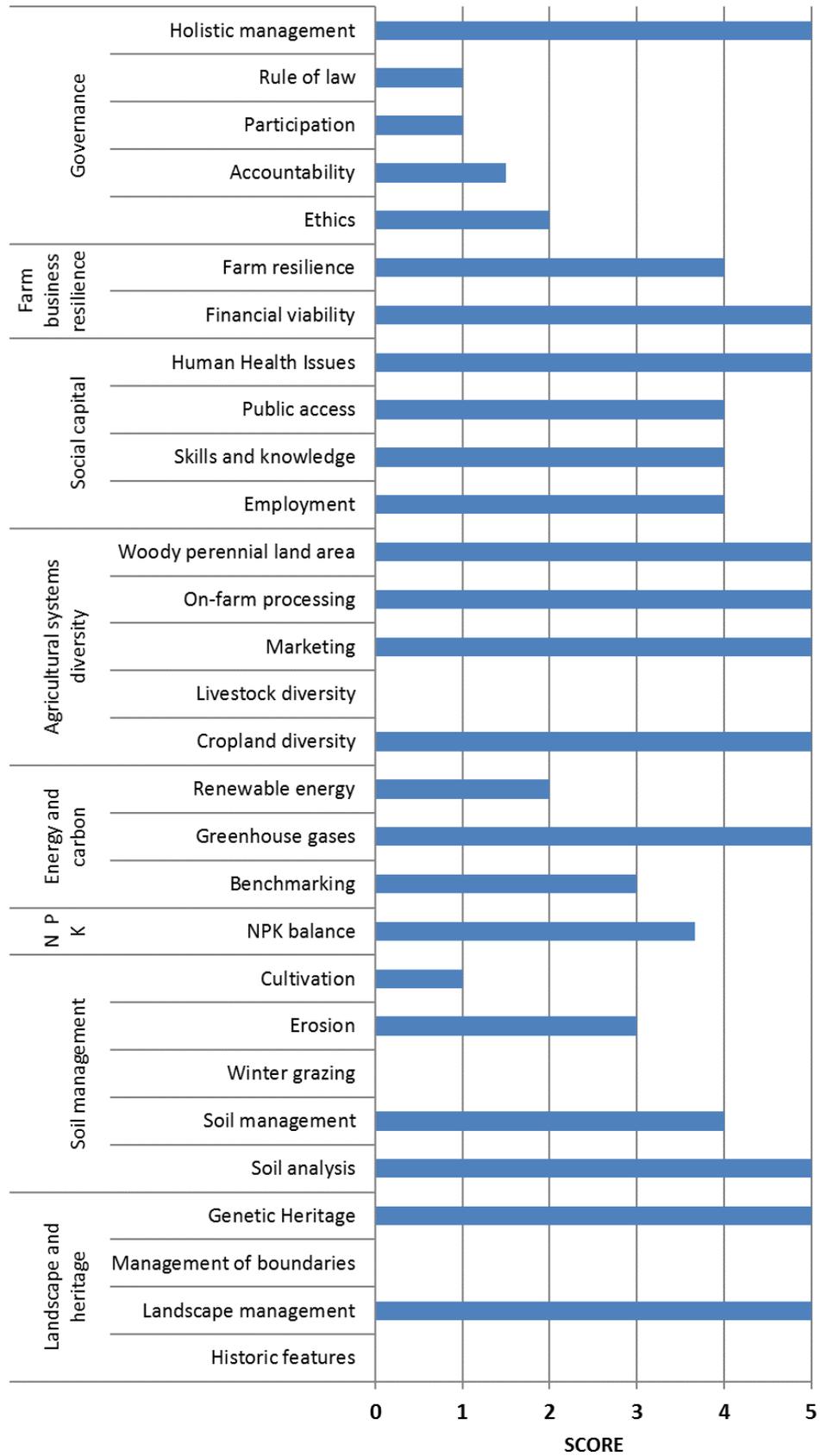


Figure 3. Bar chart showing sub-spur scores

Key assessment criteria		
Land Equivalent Ratio	1.15	
Farm gate NPK balance		
N balance per ha	4	kg
P balance per ha	-5	kg
K balance per ha	-30	kg
Energy benchmarks (energy use as % of average figures)		
Arable	53%	
Beef & sheep	No beef or sheep	
Dairy	No dairy	
Pigs	No pigs	
Poultry - layers	No layers	
Poultry - broilers	No broilers	
Domestic	13612%	
Total farm renewable energy	0%	
CO₂ balance	-1.1	tonnes CO ₂ equivalent yr
Labour use - ALUs	1.9	Please note: 1 ALU is one full-time employee working 2200 hours per year

Figure 4. Key results

Acknowledgements

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