**CASE STUDY NL-2**  
*BOER, BIER, WATER*— “FARMER, BEER AND WATER”

**BRIEF PROFILE OF THE CASE STUDY**

‘Farmer, Beer and Water’ (FBW) is a scheme for rural actors located in Lieshout, in the Dutch North-Brabant province. The scheme involves one brewery (Bavaria), over 50 farmers, and other stakeholders *i.a.* the regional water board, the municipality, and the province of North-Brabant. The scheme aims to improve the quality and availability of groundwater in the area which is used notably by Bavaria Brewery for beer production but also by farmers for irrigation. The initiative in this project is primarily taken by the private stakeholders. FBW can be characterised as a social innovation. The various stakeholders constitute an organisational network that addresses local sustainability issues – issues that go well beyond the individual level, and require the collaboration of multiple actors in the area. FBW initiates sustainability projects aimed at conserving groundwater resources in the long run. In addition, participants in the scheme found common interest in a sustainable use of soils, and created an image towards sustainability.

**KEY FACTORS IMPACTING THE PROVISION OF ENVIRONMENTAL AND SOCIAL BENEFITS**

The main goal of the scheme is to achieve and maintain a sufficient quality and quantity of groundwater in the area. Bavaria Brewery extracts each year 2.5 million m³ of groundwater for its brewing process, which causes water risks in agriculture in the summer period (droughts). At the same time about 1.5 million m³ rinse water per year is discharged into a small river (the Goorloop) and finally leaves the area. The scheme aims to ensure that future generations will be able to continue the production of beer and agricultural products in the region. Governance in this case study is based on adaptive management practices that facilitate and promote participation in the scheme and a shared understanding among stakeholders of the benefits they can provide. A critical success factor is that all participants are either dependent on the groundwater for (part of) their economic activities, e.g. farmers and the brewery, or value the sustainability of the resource (municipality, regional water board). The key factors impacting the provisions of such environmental and social benefits are thus mainly economic in this case.

**EMERGING FINDINGS AND CONCLUSIONS**

- The case of FBW is rather unique: the literature recognises that self-organisation is less likely to happen when dealing with mobile/flowing resources, such as groundwater, than with stationary units such as trees or water in a lake.
- FBW is developed and implemented by private stakeholders, and as such its approach is innovative in raising awareness, appreciation and provision of ecosystem services with a public good character.
- The local scale is key here. It has the advantage that the various participants share moral and ethical standards regarding how to behave in the self-organisation they form, and thus the norms of reciprocity. This results in lower transaction costs in reaching agreements. A critical point is that they have sufficient trust in one another to keep agreements.
- Field trips, experiments, and celebrating successes with stakeholders are most likely to get farmers engaged in FBW in the long run. After all: “seeing is believing” and “tangible results are key”.

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