

The meaning of living environmental knowledge in productive activities: the case of a Finnish dairy farm

Individuals and communities need 'living' environmental knowledge as their particular resource in order to develop their environmental practices and identities. Environmental knowledge can be defined as embedded explanatory, instrumental and evaluative knowledge, offering the 'why' and 'how' for the actors. This case study exemplifies the translation of technical-scientific environmental knowledge to professional particular resource mounted in practices.

The meaning of environmental knowledge in organic farming

Knowledge may appear as a boring and empty word; it reminds us of education and official knowledge systems, piled up in libraries and databases. Externally documented knowledge may seem to differ from 'living' knowledge, active in one's work, identity, motivation and future plans. However, 'official' and 'external' knowledge can develop links with 'living' and 'internal' knowledge, to be acted out in personal life and professional work.

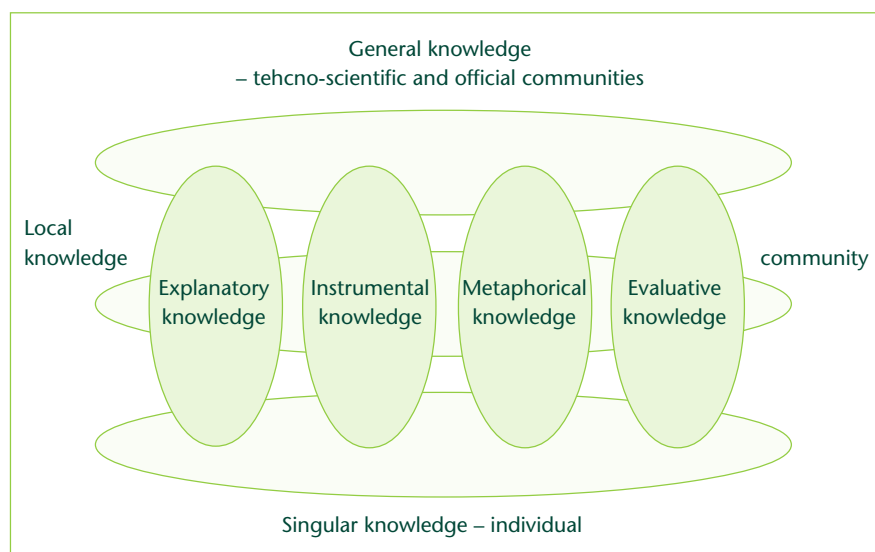
Organic farming started during the twentieth century initially mainly with other than scientific efforts. Today, both

natural and social scientific studies are made to develop organic farming. The meaning of environmental knowledge in organic farming is especially consonant with individual world view, educational knowledge resources and farming practices as well as one's identity and position in the food chain and society. Is there evidence of 'technical-scientific' environmental knowledge linking to organic farmer's 'living' knowledge? Could environmental knowledge be a powerful resource for farming activities, motivation and identity of the organic farmer? What if this kind of living knowledge would further modify productive activities and identities in the food chain?

Actor's particular knowledge, not just 'knowledge'

Instead of understanding actor's knowledge as just a solid but complex 'lump', it is interesting to view knowledge through its meaning and purpose for the actor. Niiniluoto (1989) discerns two basic types of knowledge, the singular and the general. The singular knowledge is about events and histories known to a particular individual, whereas general knowledge reflects the technical and scientific knowledge documented in public storages and matters commonly known as causes and consequences. The local knowledge can be seen to position between these two; it is knowledge shared in a particular locality and community, unknown to outsiders.

There are still other types of knowledge (Niiniluoto 1989), without which everyday work would miss its human core. The explanatory knowledge represents the knowledge – often very particular – why some phenomena happen and it can be used as a basis for particular activities. Instrumental knowledge includes the methods how to achieve particular goals and tasks. Evaluative knowledge indicates an evaluation scale and some criteria of goodness. The knowledge about norms, understanding of the good and evil by a society, group or person is kind of evaluative knowledge too. Metaphor expresses knowledge in a very crystallised and 'strong' form. All these knowledge types can act



Knowledge types active in organic farming based on Niiniluoto (1989) and modified by Minna Mikkola.

simultaneously through an individual and community, participating in activities, decisions and identities.

Environmental knowledge benefitting practices and building up identities in organic farming

In this Finnish case study the environmental knowledge types identifiable in the everyday practices of an organic dairy farmer were studied by interviewing the farmer and analysing his talk. Essential technical-scientific general knowledge was clearly spilling into other types of knowledge, gaining 'life' in every-day work.

By the examples listed below, the mounting of techno-scientific environmental knowledge as particular 'living' knowledge types becomes visible in practises and values of organic dairy farmer. Clearly, it has benefitted the development of practices, offered bases for their evaluation and participated in the building

of the identity of the farmer.

- Explaining why organic primary production is more energy efficient than conventional.
- Knowing the instruments or methods of nitrogen fixation.
- Evaluating different production methods based on nutrient balance.
- Understanding organic production as locomotive in the society.

On the basis of this case study, translation of environmental knowledge into food chain actors' particular professional activities, motivation and identity can be followed. This example opens visions for living environmental knowledge to further modify productive activities and identities within the food chains. ■

Minna Mikkola
E-mail: minna.mikkola@helsinki.fi,
minna.mikkola@nic.fi

Minna Mikkola is a PhD student in the University of Helsinki, Environmental science, writing her thesis about ecosocial development dynamics of food chains. She works as research scientist in a project funded by Ministry of Agriculture and Forestry, Organic farming research program 2003–2005 at Institute of Rural Research and Training, University of Helsinki.

Literature

- Altieri, Miguel A. 1987. *Agroecology The Scientific Basis of Alternative Agriculture*. Westview Press, Boulder. IT Publications, London.
- Niiniluoto, I. 1989. *Informaatio, tieto ja yhteiskunta. Filosofinen käsiteanalyysi*. Helsinki. Valtionhallinnon kehittämiskeskus. Valtion painatuskeskus. In Finnish. (Information, knowledge and the society. Philosophical concept analysis. Government Development Centre. In Finnish)
- Wenger, E. 1998. *Communities of Practice. Learning, Meaning, and Identity*. Cambridge University Press. New York.

EU-projektet OMIard:

Ekologiska marknadsinitiativ värdefulla för lokal utveckling

Företag som marknadsför ekologiska produkter är oftast små och har begränsade resurser. Enligt det EU-finansierade projektet "Organic Marketing Initiatives and Rural Development" (OMIard) har de ändå lyckats finna strategier som varit framgångsrika även i avlägsna landsbygdsområden.

I ett tidigare skede gjorde den höga efterfrågan och den låga konkurrensen att det var relativt enkelt att utveckla lyckosamma affärsidéer. Senare, när marknaden har växt, krävs mer kundorienterade strategier. Det räcker inte längre enbart med ekologisk produktion som marknadsargument.

Några av de viktigaste faktorerna för att lyckas är leveranspolicy, logistiken och förädlingspolicy. Personligheterna hos grundare och affärsledare är avgörande för att få med ägare och producenter på företagets vision. De ekologiska värderingarna måste genomsyra hela kedjan fram till konsumenten. Konsumenterna måste få veta fördelarna med produkterna och de måste känna förtroende för aktörerna i kedjan.

Trots att det mesta av försäljningen, särskilt i Norden och Storbritannien, går till snabbköpskedjorna ("supermarkets"), vill många ändå utveckla direktförsäljning och den regionala marknaden.

I OMIard ingår tio partners från åtta europeiska länder. Sammanlagt har 67 marknadsinitiativ i 35 utvalda regioner undersökts. Dessutom har nästan 800 konsumenter intervjuats och 72 diskussioner i fokusgrupper genomförts.

I projektet konkluderas att de ekologiska marknadsinitiativen har en positiv potential för miljö samt social och ekonomisk utveckling i avlägsna landsbygdsområden. Denna potential kan tas tillvara av nationella och europeiska makt-havare, särskilt när instrumenten för EU:s nya landsbygdsolitik ska utvecklas.

Mer om OMIard finns på
www.irs.aber.ac.uk/omiard ■