Transition towards multifunctional agriculture in The Netherlands through an innovation network of rural entrepreneurs

Daniël De Jong^a, Francisca Caron-Flinterman^a, Andries Visser^b, Gerard Migchels^a, Onno van Eijk^a

Abstract: The innovation network Waardewerken is a Dutch network of rural entrepreneurs pioneering in multifunctional agriculture. Multifunctional agriculture explicitly aims to fulfil additional functions in the private and public domain, such as nature conservation, green care, recreation and education. The innovation network aims to contribute to a professional multifunctional agriculture sector in the Netherlands. For this purpose it cooperates with researchers and policymakers in order to improve policy conditions and to develop knowledge for multifunctional farmers. In 2007 the achievements during the first four years of this network were evaluated. The Most Significant Change method was used to identify the results of the network. The evaluation showed that the network has had an important role in creating acknowledgement of multifunctional agriculture as a sustainable business strategy among policy makers and other stakeholders. The members of the network are capable to inspire people with their practical and innovative stories about multifunctional agriculture.

Keywords: multifunctional agriculture, innovation network, monitoring & evaluation, most significant change

Introduction

This paper deals with knowledge transfer within the Dutch multifunctional agriculture sector through an innovation network of rural entrepreneurs. Within the research programme on system innovations towards multifunctional agriculture of the Ministry of Agriculture, the innovation network Waardewerken (rural entrepreneurs with triple-P values) is a grindstone for research and policy. The network is supporting researchers and policymakers since 2004, to set the research- and policy agenda. The network also contributes in the process of knowledge development and knowledge transfer to end users.

Background

During the second half of the 20th century knowledge transfer within the Dutch agricultural sector was described as the OVO-triangle (Nieuwenhuis, 2002). OVO stands for research, information and education and thus refers to a linear, top down process where new technology and policy was developed by the research community and the government and implemented in the agricultural sector.

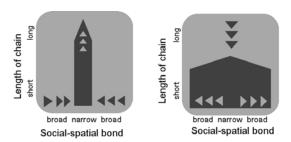


Figure 1. Model of Wiskerke et al. (2007)

^aAnimal Sciences Group, Wageningen University and Research centre, Lelystad, The Netherlands; ^bApplied Plant Research, Wageningen University and Research centre, Lelystad, The Netherlands - <u>daniël.dejong@wur.nl</u>.

The successful modernisation of Dutch agriculture, characterised by high specialisation of farms, is partly a result of the OVO-triangle. However, the drawbacks of the modernisation of agriculture became visible in issues like environmental pollution and disconnection between agriculture and society. The latter can be illustrated by a model of Wiskerke et al. (2007) in which the length of the production chain is compared with the social-spatial bond with respect to the locations of production and consumption of products and/or services. Within the modernisation era there is a development that can be characterised as a decrease of regionally bound products and services, like food and care. As a result the social-spatial bond becomes more narrow while the length of the production chains increases. This process is driven by an economy of scale, functioning in a global market. As a reaction, in an economy of scope several economical and non-economical activities and functions in a region are combined to create regional synergy and quality of live, resulting in a broad social-spatial bond and a short chain with respect to services and products. Multifunctional agriculture is an important economy of scope movement, emerging as a reaction to the ongoing modernisation of agriculture, and fulfilling multiple regional functions in the private and public domain.

Evaluation with the Most Significant Change (MSC) method

In 2007 the first four years of existence of the network Waardewerken were evaluated using de MSC method (Arkensteijn et al., 2007; Dart, 2005; Davies and Dart, 2005). 14 interviews where conducted, within this method you collect stories about the most significant changes, with different stakeholders in and around the network (network members, researchers, policymakers, other related organisations). In a workshop the stories where analysed and interpreted. For two domains, policy development and learning from an innovation network, the significant changes have been identified.

Experiences and results

This paragraph starts with a general descriptions of experiences and results of the network, in the last part the results of the evaluation are described. The input of the network is appreciated by researchers as well as by policymakers. Conform the marketing model of Rogers (1983) the participants of this network can be characterised as innovators. The group of rural entrepreneurs are the first facing struggles in the process of implementing multifunctional agriculture. As a network, they are identifying transition points for the further development and professionalization of the multifunctional sector. Members of the network are also participating in research projects which leads to a high level of ownership. As a result of this ownership members of the network themselves are involved in transferring the developed knowledge to several end user groups.

An example of a research project in which the network participated is 'space in regulations'. The necessity to adjust spatial-planning legislation has been addressed in this project. In rural areas this regulation is, presently designed for traditional mono-functional agricultural activities. Within the project, members of the network, researchers, policymakers and staff of the Dutch association of municipalities cooperated in order to construct a top ten list of spatial-planning obstructions, followed by a top ten list of success stories around spatial planning.

From the results of the evaluation the network proved to have had an impact on policymakers. The network members were able to show that multifunctional agriculture is a potential professional sector. Through direct contact between Waardewerken and policymakers the network could contribute to a paragraph about multifunctional agriculture in a policy document. This was the first policy document mentioning multifunctional agriculture as a sustainable development direction for rural entrepreneurs.

In addition, the innovative entrepreneurs in the network appeared to be a source of inspiration for multiple stakeholders around the network. They are capable to present their experience and to show examples from practice. Their stories are important to get a good view of the possibilities of multifunctional agriculture.

Conclusions

The activities in and around the innovation network Waardewerken play an essential role in developing and transferring knowledge that is linked to multifunctional farming systems. The evaluation of the achievements during the first four years of this network indicates that the network

was able to create acknowledgement for multifunctional agriculture among both policymakers and other stakeholders and thus strongly contributed to the success of the implementation of multifunctional agriculture in the Netherlands.

However, the success of multifunctional agriculture in the Netherlands could also be explained as a reaction to the drawbacks of the very efficient and rational modernisation of agricultural production systems in the Netherlands. Other European regions face comparable problems when striving for ongoing yield increase, efficiency, and modernisation of agriculture, although they will exploit different routes of solution. The establishment of networks of innovative entrepreneurs and their cooperation and knowledge exchange with policymakers, researchers and other stakeholders, may certainly facilitate finding sustainable solutions towards a more sustainable agriculture in those regions as well.

References

Arkesteijn, M., Mierlo, B. van, Potters, J., 2007. Methoden voor monitoring en evaluatie van innovatieprojecten, Report, WUR, The Netherlands.

Dart, J., 2005. Evaluation for farming systems improvement: looking backwards, thinking forwards, Australian Journal of Experimental Agriculture, 45, 627-633

Davies, R., Dart, J., 2005. The 'Most Significant Change' (MSC) Technique: A Guide to Its Use.

Nieuwenhuis, L.F.M., 2002. Innovation and learning in agriculture, Journal of European Industrial Training, 26, 6, 283-291.

Rogers, E. M., 1983, Diffusion of Innovations, 3rd Edition, The Free Press, New York,

Wiskerke, J.S.C., Roep, D., Broekhuizen, R.E. van, 2007. Transition towards a varied rural area, Chapter in book aimed at a professional audience.