Professionalizing multifunctional agriculture in the Netherlands: the role and functioning of an innovation network of multifunctional farmers

Andries J. Visser, Daniel de Jong, Arjan Dekking and Gerard Migchels

Paper prepared for the International Conference on Multifunctional Agriculture and Urban-Rural Relations 'Agriculture in an Urbanizing Society', 1st – 4th of April 2012, Wageningen, The Netherlands.

Andries J. Visser, PhD

Applied Plant Research Wageningen UR P.O. Box 430, 8200 AK Lelystad The Netherlands andries.visser@wur.nl

Daniël de Jong, MSc

Applied Plant Research Wageningen UR P.O. Box 430, 8200 AK Lelystad The Netherlands daniel.dejong@wur.nl

Arjan Dekking, Ing

Applied Plant Research Wageningen UR P.O. Box 430, 8200 AK Lelystad The Netherlands arjan.dekking@wur.nl

Gerard Migchels, MSc

Livestock research Wageningen UR P.O. Box 65, 8200 AB Lelystad The Netherlands gerard.migchels@wur.nl

Abstract

In this paper we describe the role and the functioning of the innovation network 'Waardewerken'. This network with 20 pioneers in multifunctional agriculture had a role in the development of the

multifunctional sector in the Netherlands during the period 2004 – 2011. All 20 entrepreneurs had a flourishing agricultural enterprise. Besides their agricultural production, all farms organised other activities and together they covered the most common activities in Dutch multifunctional agriculture like nature conservation, farm shops, green care, education, recreation, childcare. In this network entrepreneurs and researchers closely worked together in order to stimulate the growth and the professionalization of the multifunctional agriculture sector. The network operated on several levels: influencing policy (locally, regional and national) in order to establish support, compose and implement a research and action agenda and inspiring other agricultural entrepreneurs with good examples and new knowledge. The organisation of the network, the different roles of the researchers and entrepreneurs involved, the impact of the network and the lessons learned will be discussed.

Key words

Multifunctional agriculture, pioneers, entrepreneurs, innovation network, professionalization

1. Introduction:

Dutch agriculture has been very successful since the 50's through a focus on science, technology and innovation resulting in intensification of production, scale enlargement and specialisation in the production and in chain organisation and management (Slingerland & Rabbinge 2009). This success was accompanied with loss of landscape quality, loss of biodiversity, crisis in animal health control, the depletion of natural resources and completing claims on land use. Society and agriculture estranged from each other, supported by a strict division between city and rural hinterland and the fact that more and more people live in cities (Wijnands & Vogelezang 2009, Visser et al. 2009). In the 80's and 90's driven by the wish to re-establish the relationship with consumers some farmers started providing public services besides food production on their farms. For a description of the mechanisms and interventions resulting in this initial changes of farming strategies see: (Oostindie et al. 2006). In this paper we refer to farms providing nature and landscape management, green care, education, farm shops or childcare and recreation as multifunctional agriculture (Vereijken et al. 1999, Vereijken 2002). Data on numbers of multifunctional farms or financial turnover were not consequently gathered before 2003. In 2003 it was estimated that already 16.000 farms had a multifunctional activity although it was assumed that on average it only contributed minimal to the farm income because most farms were only involved in nature conservation (Venema et al. 2006). In the following years, the total numbers of farms with multifunctional activities did not grow substantially except for the activities green care and childcare. The contribution to the farm income however increased substantially with a total financial turnover of 322 M€ in 2007 and 411 M€ in 2009 for the multifunctional sector in total (Roest & Schoorlemmer 2010) indicating a large increase in professionalization. This increase in professionalization was supported by all kind of factors like new policy on multifunctional agriculture in 2005, the installation of a taskforce multifunctional agriculture by the Dutch ministry of agriculture in 2007 and also by initiatives coming from innovative entrepreneurs. In 2003 a network of 20 innovative multifunctional entrepreneurs was started. In this network entrepreneurs and researchers closely worked together in order to stimulate the growth and the professionalization of the multifunctional agriculture sector. In this

paper we describe the creation and the functioning of this network and reflect on the role this

2. Methods

a. Selection

network played in the above described processes.

In 2003 in the research programme Multifunctional agriculture, funded by the Dutch ministry of agriculture, the wish existed to focus more on the multifunctional agricultural practise and transform the on-going research towards participative research with multifunctional entrepreneurs. In 2004, 20 farmers with a multifunctional farm were brought together in the innovation network 'Waardewerken'. An important selection criterion was that farmers had a good functioning agricultural farm representative for a specific agricultural sector. These 20 farms represented different farming types like arable farming, dairy farming, beef cattle production, pig farming, vegetable production fruit production and bulb flower production. A second criterion was that the farms had an innovative, profitable multifunctional activity on their farm and that these activities were above average. All selected farms had a range of different multifunctional activities like green care, landscape management, recreational activities, farm shops etc. Most farms had more than 2 different multifunctional activities on their farm resulting in a good representation of the most common multifunctional activities at that time in The Netherlands (Fig.1, Table 1). Finally, since one of the objectives of the network was knowledge development and knowledge transfer, farmers were selected on their participation in farmers associations, local networks and on their communicative skills.



Fig. 1. Members of the network Waardewerken. Numbers refer to table 1.

Table 1. Members of the network with years they participated and their agricultural and multifunctional activities (see also http://www.waardewerken.nl)

Farmnumber	Name	Years	Agriculture	Multifunctional branche
1	Biologische Boerderij De Eerste	2004-2005	Dairy cows, vegetables	home sales, cheese making
2	Nieuw Bromo		Dairy cows	Nature conservation
3	Landgoed Scholtenszathe		Arable farming	Estate
4	De Terp	2004-2005	Cattle, pumpkins	Care farming
5	Zorgboerderij Het Trefpunt		Dairy cows	Care farming
6	Kaasboerderij Schellach	2004-2005	Dairy cows, arable farming	Farm shop, cheese production
7	Boerderij Het Exoo	2004-2005	Dairy cows, pigs	Farm shop, nature conservation
8	De Zonnebloem	2004-2005	Sheep, vetgetables	Care farming
9	De Hemelrijksche Hoeve	2004-2008	Cattle	Care farming, nature conservation
10	Philips Fruittuin Wielewaal	2004-2008	Orchard	Farm shop, recreation
11	Landgoed De Olmenhorst	2004-2008	Orchard	Farm shop, recreation
12	Agrarisch Cultuurgoed	2004-2008	Dairy cows	Recreation
13	Zorgboerderij Klaterspeel	2004-2011	Pigs	Care farming
14	't Geertje	2004-2011	Dairy cows, dairy goats	Recreation, farm shop
15	Stadsboerderij Almere	2004-2011	Arable farming, cattle	Farm shop, education
16	Zonnehoeve	2004-2011	Dairy cows, arable farming	Care farm, stables, bakery, webshop
17	Bloembollenkwekerij Arie Lap	2004-2011	Flowerbulbs	Nature conservation
18	Hotel Boerderij Akkerlust	2004-2011	Dairy cows	Recreation, education
19	Fruittuin Verbeek	2006-2011	Orchard	Farm shop, location for small businesses
20	De Cinquant	2006-2011	Vetgetables, cattle	Care farming, nature conservation
21	Kaasboerderij Weenink	2006-2011	Dairy cows	Farm shop, recreation
22	Kinderdagverblijf De Boerderij	2006-2011	Dairy cows	Childcare
23	Aktiviteitenboerderij Fjouwerhuste	2006-2011	Cattle	Recreation, farm shop
24	Geitenbedrijf 'De Ridammerhoeve'	2006-2011	Dairy goats	Recreation, farm shop, restaurant
25	Thedingsweert	2006-2011	Arable farming, cattle	Care farming, farm shop
26	Ko-Kalf	2006-2011	Cattle	farm shop, education, nature conservation
27	De Boerinn	2006-2011	Cattle	Recreation, restaurant
28	Boerderijspa	2009-2011		Recreation, ice, wellness
29	De Boerenstee		Dairy cows	Recreation, meetings, restaurant
30	De Kleine Schorre	2009-2011		Wine making, receration
31	Hoeve Kraaiveld			Care farming, nature conservation, estate
32	De Smits Groep		Pigs, arable farming	Energy, recreation

b. Start of activities and creating ownership

After setting the criteria for participation, approximately 30 farmers were approached to participate in 4 regional meetings to discuss the project and were given the opportunity to ask questions, make remarks and bring forward their greatest concerns and ambitions. The outcome of these meetings was used to sharpen the project goals and structure and were also used to narrow down the selection to 20 members.

In November 2004 the network was started with a start-up meeting with 18 members of the network. In this meeting the main objectives were meeting each other and learning about each other's farms, drive and motivation and setting common goals for the first year(s). Based on the input of both members and researchers the main objective for the project was contributing to a substantial (20% of all farms) and professional multifunctional agriculture sector in the Netherlands in 2020. In order to get there, the following sub goals were set: 1. Influencing national policy on multifunctional agriculture to create room for development, 2. setting up and carrying out a research agenda for innovation necessary to support the development of the multifunctional sector and 3. learning and inspiring each other in order to keep the network alive and so inspiring other farmers.

An important principle of the project, which came forward in the regional meetings and the start-up was that the wish to make it a really joined project of entrepreneurs and researchers. This was achieved by the formation of a project team in which 3 researchers and 3 delegates from the farmers worked together and discussed strategy, actions and communication of the project. Farmers were not paid to participate in the project, the goal was to make the network so interesting for members, that they were willing to participate freely. All members in the network met at least twice a year: once in early spring during 2 days where more strategic topics were discussed and one day in autumn where farms from the network were visited and developments on that specific farm were discussed. On each meeting the balance between bringing knowledge to the network and taking knowledge from the network was always discussed and adjusted if necessary.

c. Monitoring and evaluation

In 2008 the results of the network were analysed using the most significant change (MSC) technique (Davis & Dart 2005; Arkesteijn et al. 2007). The methodology focusses on the most significant changes a group of stakeholders around the network have experienced. Stakeholders all had some kind of a relation with the network which is a precondition for this method and had different positions and backgrounds within and without the network. Fourteen different stakeholders were interviewed around two aspects of the main goal of the project: policy development on multifunctional agriculture and learning from the network.

3. Results

a. Vision on multifunctional agriculture in 2020

The first step in the development of the network was working on a joint vision on multifunctional agriculture in The Netherlands in 2020. In a 2 day workshop the members developed this vision and the vision was later on discussed and sharpened in workshops with relevant actors like nature organisations, leisure organisations, policy makers etc. In these 2-day meetings always an external professional was hired to guide the different sessions. This was an important aspect in building the network because it enabled the researchers to participate in the network as a full member (Visser and Jansma 2009). The members also changed the name *innovation network multifunctional agriculture* into 'Waardewerken' which can be translated as 'working for value'. The most important aspects of the vision are described in box 1.

Box 1. Vision of Waardewerken (2005).

In 2020 agriculture is a highly appreciated part of society again and provides beside agricultural products quietness, space, rhythm and leisure. Approximately 20% of the farms get a *substantial* income from multifunctional activities summing up to a total turnover of 2 billion Euro. The public has found its way to these farms. This already starts in primary school but also through farm

markets and farm visits. Multifunctional farmers present a broad range of different products and services and the consumer is well informed through proper communication programmes. The sector is highly professionalized and has developed a good quality standard and a good balance between demand and supply. Liveability in the countryside has improved, the decrease in numbers of farms has stopped. Farms exploring multifunctional activities still have a functional agricultural business since agriculture is the basis for providing services. Multifunctional farms play an important role in safeguarding and developing the landscape.

Through backcasting (Quist & Vergragt, 2006) members identified the most important transition points or bottlenecks which had to be solved in order to realize the future image described in the vision. These transition points were the basis for a research and action agenda the network produced. The most important transition points are described in box 2.

Box 2. Transition points (2005) concerning the development of multifunctional agriculture (MFA)

1. Knowledge and knowledge exchange is insufficient

Knowledge mainly on individual farms, pioneers

No exchange or exchange systems

Little attention for knowledge development in research and policy

Knowledge level advisors from farmers associations low or absent

2. Level of professionalism is too low

No attention for MFA in education at all levels

Farmer organisations do not support MFA

No overall professional MFA organisation, neither on sector level

3. Legislation is not suitable or lacking

Legislation was developed for farming, not for services

Legislation or interpretation of legislation may differ locally

Time consuming procedures

4. Communication on MFA is minimal

Public / consumers not familiar with MFA

Policy not familiar with MFA

Regular farmers have little info on MFA

Good practices not described and not shown

5. Too little focus on development of new products and services

For expected growth more differentiation in MFA portfolio is needed

Products and services are product driven, not consumer (group) driven

The fact that multifunctional agriculture was not well known by policy makers, was the incentive to organise several meetings with policy makers of the ministry of Agriculture in order to discuss the networks vision, breakthrough agenda and present their multifunctional farms. These discussions were highly appreciated by the policy makers involved (Jong de *et al.* 2008).

These actions finally resulted in one (small) specific chapter on multifunctional agriculture in the new vision on Dutch agriculture (Nota Kiezen voor Landbouw, 2006) of the ministry of Agriculture. The innovation network Waardewerken was mentioned specifically in that chapter (box 3.) Looking back, especially the remark for the need for an overall organisation to stimulate MFA was very important. This specific sentence finally resulted in the motion Waalkens & Atsma which was presented in the Dutch parliament at the Minister of agriculture in April 2006 and where he was asked to install a Taskforce multifunctional agriculture. The motion was accepted by the parliament and the Taskforce Multifunctional agriculture was installed in 2007.

"The potential of multifunctional activities is in some parts of the country large. This is appears from an analysis of eighteen farms which are part of the innovation network 'Waardewerken'.

"An on-going professionalization is needed. Establishing an overall organisation or chain organisation for the multifunctional agriculture could provide a positive stimulus.

b. 'Waardewerken' and research projects

The innovation project 'Waardewerken' was started as a project of a larger research programme on multifunctional agriculture of the ministry of agriculture to learn from innovators in this sector. Because of the commitment of the members and their ability to address issues of importance for the multifunctional sector as a whole, very quickly research budget within the programme was allocated to this innovation network. This enabled the network to work together with researchers on the transition points they had formulated. As a result, research projects were carried out in a participative way between research and entrepreneurs. The project goals and project plan were always discussed with selected participants of the network and when relevant, entrepreneurs joined the project team. Main goal of this collaboration was to come up with results which were almost immediately applicable in practice. One of the results of this collaboration was that the outcome of research projects were, besides research reports, always presented in ways that were practical for the different target groups (brochures, tools, games etc.). It is important to point out that 'Waardewerken' looked upon itself as a network which addresses topics, helps in solving specific issues and enabling debate and discussion. If other organisations were able to deal with certain aspects of the transition agenda they were very welcome. It was not about the credits but about the results.

During the existence of the 'Waardewerken' network a whole series of publications starting in 2006, were produced on general multifunctional agriculture topics like legislation, communication, multifunctional entrepreneurship, urban –rural relationships, financing and organisation forms, and on more sector specific topics like green care farming or on farm nature management. Also internet applications were developed and even a game on multifunctional agriculture to be played by young farmers. In total 36 projects were carried out in which 'Waardewerken' was part of the project (Dekking & Migchels 2011). After the start of the taskforce multifunctional agriculture in 2007 research agenda and research products were developed in close cooperation with the Taskforce Multifunctional agriculture.

c. Keeping the network alive

At the start of the network 18 innovative frontrunner farmers joined the network. From the original eighteen, seven members stayed in the network during the entire seven years period the network existed which is quite a long period for a busy entrepreneur to stay in a network that not directly benefits his or hers business. In 2005, seven members withdraw and nine new members joined the network. In 2008, four members left and five new members joined in. In total 32 farms have participated in the network. The possibility to withdraw from the network was part of the deal, it was an open network in which it was possible to withdraw when other obligations prevailed or when a member experienced an unbalance between bringing or taking from the network. The only obligation the network posed it selves was that all members had to be present at the two-day meetings in spring and the one- day meeting in autumn.

The network had set the ideal number of members on 20, being a group with sufficient body of knowledge but also not to large enabling lively discussions. New candidates were found via the networks of members, researchers and later on after 2007 also via the network of the Taskforce Multifunctional agriculture. Important criteria for new members were: a functional agricultural farm, frontrunners in their multifunctional sector, all multifunctional sectors should stay present in the network, and new upcoming sectors (for example childcare on farms) should be invited.

The network was set up as a joined network of researchers and entrepreneurs. Both groups were 'owner' of the network right from the start. This resulted in a joined responsibility for the functioning of the network and was one of the key factors in the success of the network.

Not everything concerning the network was a success: the external communication of the network could have been better since the network and its results were not sufficiently known in the multifunctional sector. Besides that, the network did not manage to link it selves to the different multifunctional sector organisations.

d. Beyond the pioneers phase

At the start of the innovation network a lot of topics on national, regional or local level needed to be solved, stakeholders needed to be informed, good examples within the network needed to be shown in order to get all kind of stakeholders in motion. The sector was still in the pioneer phase. During the years, more and more organisations like the Taskforce multifunctional agriculture but also sector organisations became active in stimulating the multifunctional agriculture and slowly the role of the network changed. The members of the network were asked, often on individual basis, to participate in sector specific meetings to set up sector specific agenda's or give presentations on their approaches. The members acted as coach for young multifunctional entrepreneurs and also slowly moved into farmers organisations. Gradually the initial role as stimulator and pioneer changed into knowledge transfer and stimulating the growth of the sector. The main question became how the sector could grow with sufficient professionalization, how to raise the level of knowledge of the late adopters.

This simultaneously happened together with a gradual change within the network. In the third round of introducing new members in the network, focus was more on rational multifunctional farmers than on inspired multifunctional farmers (Ham & Ypma 2000). Therefore the subjects the network was interested in changed also. In the beginning the focus was on general topics for the sector as a whole based on the vision, later on the focus was more on individual farms. As a consequence the network became less interesting for the ministry of agriculture and for the researchers involved. It became apparent that the ministry of agriculture would stop with financing the network after 2011. In the beginning of 2011 the farmers in the network agreed to continue in 2012 as a self-financed network. The year 2011 was used to reorganise the network and think about a new organisation form and how the network could contribute to the next phase of multifunctional agriculture: up scaling and professionalization. At the end of 2012 the conclusion was drawn that within the group of farmers there was insufficient support for the continuation of the network and the network was ended in November 2011.

4. Conclusions and Discussion

The innovation network has had impact on policy, multifunctional practice and research. To our opinion, the following points have contributed to a successful network:

- 1. All activities were always executed with a practice oriented approach. Commonly set goals and ambitions for the multifunctional sector were the central aspect. Decisions on the network and research were always made by the network partners.
- 2. Vision of the network was shared and enriched with other stakeholders.
- 3. The network was a joint network of entrepreneurs and researchers with equal positions
- 4. Much attention was given to the balance in the network between bringing and taking knowledge to the network.
- 5. Throughout the years there was a steady team of researchers involved providing continuity in the network.
- 6. For the 2-day meetings an external professional was hired to guide the sessions enabling the researchers to participate fully and keep their role.
- 7. Entrepreneurs were always involved in research projects.

8. The network was built up out of entrepreneurs which all had a flourishing multifunctional farm. With that, the network itself was a living example and achieved a certain status.

Besides these more practical issues, also more structural aspects were of importance. The farmers were all innovators, pioneers and because of that able to rise above the interest of their own farm and see the importance of farm-transcending aspects of multifunctional agriculture. This attitude was very important in relation to sharing knowledge. The members of 'Waardewerken' were not at all concerned about sharing their knowledge, they realised that knowledge exchange was essential for further development and success. These pioneers can be described as progressive farmers (Hermans et al. 2011). They have a strong focus on reconnecting agriculture and the countryside with the urban needs and are able to reinvent and reconstruct their farms based on needs and desires of citizens. Especially this wide perspective of the entrepreneurs made the network interesting for policy makers and research.

Today, the multifunctional agriculture in The Netherlands is becoming more and more organised in sector organisations for nature conservation, childcare, education, greencare and all kind of research institutes, programme offices and different functions in advising, developing etc.(Oostindie *et al.* 2009). This institutionalization was not really compatible with the entrepreneurs in 'Waardewerken' being innovators and personally mainly interested in new initiatives and concepts. They acknowledge the importance of these developments and appreciate the fact that other entrepreneurs are willing to work on these aspects of the professionalization of the multifunctional agriculture.

The composition of the network has changed over the 7 years. The first group were more inspired multifunctional farmers with interest in the sector development. Later on more rational multifunctional farmers with interest in their own farm joined the network. This renewal of the network was an important new source of inspiration for the network since new sectors moved in the network but it was finally also the reason the network stopped because there were now two directions within the network. At the same time, collective issues were for a large part taken over by the Taskforce multifunctional agriculture. Innovation and the development of new concepts shifted towards the different sector organisations and therefore the network became less interesting for research and policy.

Innovation networks like 'Waardewerken' have an important additional value in newly developing sectors with actual bottlenecks or transition points hampering this development. Innovators and pioneers with a clear joint vision can play an important role in putting these issues on the agenda and solving them.

Acknowledgements

We kindly thank all multifunctional farmers involved in the network 'Waardewerken' for the inspiring collaboration, Koos van Wissen, Jan van Vliet en Anneke Sellis of the Ministry of Economic Affairs, Agriculture and Innovation (EL&I) for their commitment to the network, Arjan Monteny and Maarten Fischer of the 'Taskforce Multifunctionele Landbouw' for their good work on multifunctional agriculture and the way they involved 'Waardewerken'. This work was financially supported by the Ministry of Economic Affairs, Agriculture and Innovation (EL&I) in the Netherlands.

References

Arkesteijn, M., B. van Mierlo and J. Potters (2007) Methoden voor monitoring en evaluatie van innovatieprojecten (in Dutch), Lelystad: Applied Plant research PPO-AGV

Davies, R. and J. Dart (2005), The 'Most Significant Change' (MSC) Technique: A Guide to Its Use" download at: www.mande.co.uk/MSC.htm

Dekking, A. and G. Migchels (2011) *Innovatienetwerk Waardewerken. 8 jaar pionieren in de multifunctionele landbouw* (in Dutch). (Lelystad: Applied Plant research PPO-AGV).

- Ham, A. van den & M.E. Ypma (2000) Verbreding op landbouwbedrijven; Met visie en creatieve vasthoudendheid naar succes (in Dutch). (Den Haag, LEI). http://www.lei.dlo.nl/publicaties/PDF/2000/7_xxx/7_00_02.pdf
- Hermans, F., K. Kok, P. J. Beers and T. Veldkamp (2011) Assessing sustainability serspectives in rural innovation projects using Q-Methodology. Sociologia Ruralis 52, 1, pp. 70 91
- Jong de, D., S. Bos, M. Arkesteijn & J. Potters (2008) M & E Waardewerken: monitoring & evaluatie van het netwerk Waardewerken met de 'Most Significant Change' methode (in Dutch). (Wageningen, ASG Wageningen-UR)
- Oostindie, H., D. Roep & Renting, H. (2006) Definitions, references and interpretations of the concept of multifunctionality in The Netherlands Pp. 41 81 In P. Caron & T. Le Cotty European series on multifunctionality A review of the different concepts of multifunctionality and their evolution
- Oostindie, H., P. Seuneke, R. Broekhuizen van, E. Hegger & H. Wiskerke (2009) Dynamiek en robuustheid van multifunctionele landbouw. Rapportage onderzoeksfase 1: stand van zaken (in Dutch). (Wageningen, Rurale sociologie Wageningen Universiteit)
- Quist, J. and P. Vergragt (2006) Past and future of backcasting: The shift to stakeholder participation and a proposal for a methodological framework. Futures 38 pp. 1027 1045
- Roest, A. E. and H. Schoorlemmer (2010) Kijk op multifunctionele landbouw; omzet en impact 2007 2009 (in Dutch). (Den Haag LEI Wageningen-UR)
- Slingerland, M. & R. Rabbinge (2009) Characteristics of Dutch agriculture: continuous change Pp. 13 23 in K.J. Poppe, C. termer & M. Slingerland, Transitions towards sustainable agriculture and food chains in peri-urban areas. (Wageningen: academic publishers)
- Venema G., J. Jager, B. Doorneweert & A. van der Klooster (2006) Verbreding onder de 'loep' Monitoring economische positie van agrarische bedrijven met verbreding in recreatie, huisverkoop en zorg (in Dutch). (Den Haag, LEI)
- Vereijken, P, S. Spoelstra, N. van den Eeden, M. Pleijte, J. Fijneman, B. Ploeger, A.A.M.A Jahae, A. van den Ham, W. Vos, L. Douw, L. and J. Hoogendoorn (1999) Programme study on multifunctional agriculture (in Dutch) Dienst landbouwkundig onderzoek
- Vereijken, P.H. Transition to multifunctional land use and agriculture (2002) NJAS 50-2, pp. 171 179
- Visser A.J., J.E. Jansma, H. Schoorlemmer & M. Slingerland (2009) How to deal with competing claims in peri-urban design and development: the DEED framework in the Agromere project Pp. 239 252 in K.J. Poppe, C. termer & M. Slingerland, Transitions towards sustainable agriculture and food chains in peri-urban areas. (Wageningen: academic publishers)
- Wijnands, F. & J. Vogelzang (2009) Two complementary transition pathways: supporting strategies for innovation towards sustainable development in Dutch agriculture Pp. 201 217 in K.J. Poppe, C. termer & M. Slingerland, Transitions towards sustainable agriculture and food chains in peri-urban areas. (Wageningen: academic publishers)