Government stimulation of operational groups for innovation in agriculture. Understanding the framing of the government support to knowledge exchange network groups in the Netherlands, as an example for Europe

Monica A.M. Commandeur

Nedworc Foundation, Bunnik, Netherlands. Corresponding address: Spieghelstraat 40, 3521 XP Utrecht, Netherlands. Contact information: phone: +31.30.29.35.307 /mobile: +31.6.10.75.81.84; E-mail: monicacommandeur@yahoo.com

Abstract: This is a discussion paper about the articulation in the framing of the grant subsidies for farmers' knowledge exchange network groups in the context of the EU Rural Development Programme (EU-RDP 2007-2013) by the Dutch government. In this paper we make an effort to understand the motivation for the various aspects of the framing, their consequences in the practical execution of the regulation, and the framing-related remarks, which emerged in the term evaluations of 2009 and 2013.

The government stimulation of partnership-driven, multi-actor, knowledge exchange network groups in the agricultural sector of the Netherlands started with a subsidy for an R & D programme in the livestock sector in 2003. Framing the further support of these network groups in EU and government regulation frames (2007-2013) has been difficult from the start, basically because the topic contains elements of both the regulation chapters about "Education and Knowledge Dissemination outside Institutes" and about "Cooperation in Innovation".

From the analysis in this article it is concluded that the operation of knowledge exchange network groups shows clearly distinguished signs of both "Education outside Institutes" and "Cooperation in Innovation". The issue of "Knowledge Dissemination" as well as "Quality Control" are different issues. Knowledge dissemination is to a large extent a collective problem of all the projects together. Quality control over the project executions is an issue, which is best not solved by hierarchical structures. These aspects are not easily framed within the existing chapters of the regulation frameworks.

Although the implementation of the government tender regulation for farmers' knowledge network groups has extended to about 550 groups (2013), there is no record of any significant research about the fundamental decisions that were made. The evaluations that were performed (Bartels BV, 2009; Blokland et al., 2013) did not address the framing of the conceptual formula. The discussion relies therefore mainly on personal information from practices.

The collective results of all the projects, have contributed substantially to the innovativeness and competitiveness of the Dutch agricultural sector as a whole, but not to the competitiveness of individual farms. This notion, as well as the reflection on the status of the "free actor" in the project, should be an incentive to the government to reconsider the framing of the original concept.

Keywords: partnership-driven networks, multi-actor approach, operational groups, knowledge exchange networks, living networks, innovation stimulation, rural development support, EU, FP7, Horizon 2020, EIP, government support, tender regulations, regulation frame, public policy issues.

Introduction

This is a discussion paper about the articulation in the administrative framing of the grant subsidies for farmers' knowledge exchange network groups in the context of the EU Rural Development Programme (EU-RDP 2007-2013) by the Dutch government. In this paper we make an effort to understand the motivation for the various aspects of the framing, their consequences in the practical execution of the tender regulation, and some frame-related remarks, which emerged in the term evaluations (Blokland *et al.*, 2013; Bartels BV, 2009).

Support to knowledge exchange network groups: an innovation in two leaps

The government stimulation of partnership-driven, multi-actor, knowledge exchange network groups in the agricultural sector of the Netherlands started with a subsidy for an R&D programme in the livestock sector in 2003. The decision of the Dutch government to support the development of the concept of farmers' knowledge exchange groups with subsidies was in itself already an innovative leap ahead. As such the decision reflects the eagerness of the government to support innovation in agriculture, and the willingness to experiment with new scientific concepts in the scope of knowledge extension.

The subsequent decision in 2007 to frame this concept in a regulation frame was unmistakably bold. Framing the support in an EU and national tender regulation (2007-2013) was immediately difficult, basically because the concept contains elements of both the regulation chapters about "Education and Knowledge Dissemination outside Institutes" and about "Cooperation in Innovation". Dealing with this demand for regulation measures was unprecedented in the EU. Even now and so far, the experience with this innovative regulation instrument only exists in the Netherlands. As a concept the innovation has become widely embraced among all stakeholders. The concept has been evaluated several times and is now pushed forward as an example to the EU and other countries. Here the consequences of the actual framing is discussed and criticized, so we all may learn from this Dutch experience.

The first leap forward: the implementation of the concept in an R&D context

The concept of farmers' knowledge exchange network groups is about network groups of about 6-20 farmers that express their own ideas about the knowledge allocation and innovation they desire. In the conceptual research programme network groups were facilitated both with content expertise and "free actors" for organization and communication interventions. The experts were embedded in a structure for reflection (intervision), methodological support and supported by a central structure for external knowledge dissemination to other professionals in and around the agricultural sector. The "free actors" among the experts interacted with their network groups in such a way that after some time the network group members are capable of organizing the free actor role themselves (Wielinga & Vrolijk, 2008).

In the original R&D programme the government support was based on the assumption that network groups of farmers can influence the knowledge infrastructure better than individuals. The aim of the R&D programme was to strengthen the mental resilience of the farmers by supporting knowledge exchange network group formation, and facilitating to bridge gaps between farmers, experts and other actors in or around the agricultural knowledge infrastructure. The support consisted of: facilitating knowledge exchange among farmers as well as with others, both within and outside the scope of (livestock) farming, assist in the allocation and development of new knowledge focused on the aim of the project, and facilitate the external dissemination of the project results. During this programme, which focused on animal husbandry (2004-2006), experiences where obtained of some 120 network groups of livestock farmers, facilitated by 25-35 content experts and free actors (Wielinga *et al.*, 2008).

Supporting collective structures

In order to allow the concept to work two surrounding collective structures appeared important:

- 1. As 'free actors' the organization and communication experts required a new generation of tools in order to navigate in unknown situations, recognize at any moment what was at stake and intervene appropriately. Foremost they appeared in need for a surrounding structure of peer intervision, to help reflect on difficult situations.
- 2. Both the network groups and other interested professionals in the sector were eager to learn from the experiences. In order not to let them miss anything, Wageningen-UR constructed a special website to disseminate and archive all the news and knowledge of the knowledge exchange groups, as well as the cooperation in innovation groups (from another programme). To the website an electronic newsletter was attached, with brief newsflashes and forwarding links to the networks. Soon over 5,500 subscribers received the receiving an electronic newsletter (Attention Mail) on a monthly basis, and that number has increased ever since.

Towards the second leap: problems in the creation of a grant supported tender regulation

When the concept of farmers' knowledge exchange network groups the first question was in which EU support programme it should fit. The implementation in the rural development programme (EU-RDP) was a logic choice. In that perspective the conceptual formula was to be transformed into a grant subsidy supported tender regulation. Consequently, the government was faced with unprecedented problems about the legal framing. The most fundamental problem was, whether these network groups should be perceived as a "collectives of businesses that engage in knowledge development activities outside institutes", or as a "public-private cooperation in business innovation". For an outsider, this may sound as an insignificant game of words, but in the legal perspective this is very significant.

Content implications:

If they are "knowledge development activities outside institutes", then the consequence is:

- there should be education plan that can be assessed for quality criteria;
- there should be qualified teachers linked to the education plan;
- there should be a surrounding structure of experts to assess the educational quality;
- the deliverables of the education process can only be described in terms of learned or gained knowledge and not in terms of result products;
- the gained knowledge cannot be owned or protected from use by others (by copyrights);
- the gained knowledge as such cannot be sold or marketed;
- the gained knowledge cannot lead (directly) to increased business competitiveness;
- subsidy grants up to 100% are possible.

If they are "public-private cooperation in business innovation", then the consequence is:

- there should be an innovative project plan that can be assessed for quality criteria;
- there should be qualified experts linked to the project plan;
- there should be a surrounding structure of experts to assess the innovativeness;
- the deliverables of the project can be described in clear terms of result products;
- the result products will be owned and may be protected from use by others (copyrights, patents);
- the result products may (if desired) be sold or marketed;
- the result products may lead (directly) to increased business competitiveness

• subsidy grants should be limited to compensate for increased competitiveness (usually 35-70%).

From the start the government workers realised, that the concept of farmers' knowledge exchange network groups incorporated elements of both, and could not be single-framed in either one frame.

Procedural implications:

- There should be a chronologically subsequent distinction in activities, between before, during and after the quality assessment phase of the (education or project) plan, in order to allow the grant to be submitted to the plans that fit best with the quality criteria;
 - o Quality criteria for assessment and an assessment procedure should be established;
 - A procedure for the nomination of experts for the assessment should be implemented, etc.
- Applications should be done by two or more independent agricultural enterprises,
 - Sometimes with activities in a specific subsector (NACE-code) or area (area code);
 - o Sometimes the aim is required to make advancements in specific political topics.
- Activities that are developed before the formal project approval cannot not be granted.

These procedural complications implicated additional framing problems. It meant that one way or another an initial (education or project) "plan" should be developed, which can be assessed for quality. This requirement conflicts basically with the concept of working in knowledge network groups, in which the process of "problem articulation" is part of the execution work. Besides it is difficult to identify the required expertise of the assessors, as well as the criteria for determining their impartiality.

The creation of a grant supported tender regulation: outlines and discussions

Based on discussions with the R&D scientists and their own interpretation of the legal options the Dutch government decided that farmers' knowledge exchange network groups should be perceived as collectives of businesses that engage in knowledge development activities outside institutes, and should therefore be framed in the associated chapter in the EU-RDP of the 7th Framework (EC Council Regulations N° 1857/2006; N° 1698/2005; and N° 1257/1999). However, the network group activities were perceived within this frame as a kind of public-private cooperation in innovation.

Basic content implications

- Through active participation of the applicants, the government presumed that external financial investments could be attracted, and/or that the result products of the activities would lead to business gains for the participants due to increased competitiveness:
 - o In order to correct for this presumed intervention with the competitiveness only 70-80% of the execution costs were subsidized (including the costs for the project leader):
 - i.e. about 45-55% of the project execution costs excl. the project leader.
- Note: within this perception the participating farmers were basically allowed to protect the result products with copyrights, patents, etc., although the government admitted that such would not comply with the conceptual formula of the programme.

Conception of the project plan

There are international agreements that "ideas" as such cannot not protected by law. People who have new ideas are self-responsible to hide their ideas, if they do not want any others to use them. However, the result product from capturing an idea, e.g. in the form of a design or a plan is protected by (EU) laws, which attributes automatically the intellectual property rights to the designer or author.

- Initially the Dutch government decided that there was no "project plan" or "plan design" required from the network group to make a grant application: the quality of the applications would be assessed by experts based on the "ideas".
 - The government motivated this point of view by pointing to the fact that project plan adaptations are possible throughout the project execution, within the project budget limits.
 - Like this, the government could avoid the confrontation with fact that within the EU-RDP chapter about "knowledge development outside institutes", there was no option for demanding project plans for a quality assessment.
 - Consequently the government did not need to deal with the question whether and to what extent pre-application project plan design should be granted: in this perception plan design activities were simply not performed. In addition the government did not need to respect anyone's intellectual property rights on any plan design, as a result product from working.
 - However, the government did think that the applicants' self-responsibility to hide their ideas from others, should be supported by the government and therefore respected, similar to the way that intellectual rights are usually respected.
 - consequently the "project ideas" were assumed to be owned by the applicants.
- After the first year of the implementation (2007) the government recognized that this denial of their requirement of project plans for quality assessment, led to insurmountable problems in the quality assessment procedure.
 - Since 2008 the Dutch government requires therefore that the applicants (in practice: the intended project leaders) fill in an application content form, that contains all the usual standard elements of a project plan.
 - O So far, the government has not explicated the consequences of this adaptation however, for recognition for this pre-application work and the related intellectual property rights.
 - Consequently, important questions were never raised, like: 'Is the designer the single owner of a project plan, and what may network group members claim in it?', 'How can the project plan be validated as a product, and to what extent can it be marketed?'.

The "free actor" – and his legal status

In the scientific literature a lot of names are attached to the expert that operates as a "free actor" in knowledge development projects: project leader, project director, project coordinator, project facilitator, process leader, process guide, etc. All these names cover part of the job, but not entirely. The term "free actor" covers the fact that the expert may take various roles, but sounds rather unframed. Terms as: "leader", "director", "coordinator", and "facilitator", all suggest a hierarchical position. This is not correct in general, although the expert may sometimes take up the lead

firmly. The term "process" takes the attention away from the fact that specific deliverables in terms of knowledge are aimed.

Actually the so far unused term, "project convenor" could well fit, since it signifies a.o. someone who assembles for a public purpose; a person whose job it is to call adherent people together for meetings in relation to a public duty. However, this would implicate that the status of the "project convenor" in a knowledge network group is basically a public job – outside the control of governmental or scientific institutes. In the general discussion (Chapter 4) it is concluded that such is indeed a correct image.

Quality assessors and assessment criteria

There is no conclusive hand-out for the type of experts that can act as quality assessors, what their qualifications should be in reference to the assessment criteria – as well as what the assessment criteria should be about. Since the implementation of the conceptual formula in 2007 the perceptions about how it should be have fluctuated over various policy workers involved, and over the years.

- Policy workers in the government use different hand-outs to ensure impartiality: some exclude farmers from the assessment team, others exclude all free actors (i.e.: other project convenors).
 - o Consequently, the assessment teams are often biased in composition.
- Since 2010 policy workers themselves are no longer allowed in the assessment team; however, since then the assessment criteria and their relative weighing evolved increasingly towards politically associated criteria. Project plans should fit first with specific policy themes for sectors, industries or regions. Next the project plans are ranked to specific criteria (see also Table 1).
 - Consequently, the role of the "quality assessment" as an instrument for "quality decisions" about grants for project ideas and plans is increasingly questioned by the applicants.
 - Some additional notes:
 - This assessment procedure stresses the concept of "quality" in the assessments.
 - The farmers' knowledge network groups that apply, feel decreasingly recognised in the assessment procedure as initiators of the development of innovative knowledge.

Table 1: Quality assessment criteria and weighing factors, as applied in 2013 to the so-called "small farmers' knowledge network groups": at least 2 participating enterprises and a max. project budget of \in 50,000.00, for which 80% (\in 40,000.00) may be granted – including the costs for the project leader.

Assessment Criterion (2013):	Weighing factor:	Score: (1-10)
(a). Chosen theme is innovative	3	(1-10)
(b). Effectiveness of the dissemination of knowledge and experience	3	
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2	
(c). Chosen approach is effective		
(d). Contribution to sustainability	2	
(e). Composition of the network	2	
(f). Process oriented perspective	2	
(g). Cost/quality ratio	2	
Weighted average final score:		

Project adaptations and project granting

Consistent with the conceptual formula, project plan adaptations are basically allowed unlimitedly within the project budget, as long as the project goals are still pursued. However, there is no clear hand-out about how grant administration workers should deal with the implications:

- How should "project goals" in this conceptual formula be perceived? Are they the overall aim, the specific objectives or the specified deliverables?
- Usually it is no problem for the payment of the grant, if a specific goal is pursued, but failed to achieve; however...,
 - o which type of added activities (e.g. based on advanced insights) should or should not be allowed considering the goals, under the grant conditions?
- Ultimately: should it be possible for a network group to make design a project plan in the way that the assessors like to read it, and next execute their project in the way that they like to do it?
- Note: in the second evaluation the interviewed assessors suggested that therefore the assessors of the grant procedure should be linked to the granted projects as a kind of steering experts (Blokland et al., 2013).
 - o The acceptance of this suggestion would mean that the responsibilities of the project convenor (free actor), would effectively be subordinated to a hierarchical policy steering structure, without the involvement of formal policy employees.
 - So far, there is no indication yet that the acceptance of this suggestion is considered.

Dealing with the collective aspects

Methodical tools and intervision

After the initial R&D programme (2004-2006) the general support to the project convenors were cut down to a general course of Wageningen-UR, and only for the convenors of the granted projects. At that point the development of methodological tools seemed basically finished (Wielinga *et al.*, 2008). A course, in which the methodological tools are explained and practiced, became also available as a paid course, and is since offered by Wageningen Business School (WBS).

The remaining free course for project convenors was since disputed for not meeting the needs of the experienced convenors, who instead preferred the development of a certification system for the profession and the formation of intervision groups (Blokland *et al.*, 2013). In 2013 the free courses were no longer offered (i.e. subsidized by the government) and the surrounding support structure for project convenors within the Wageningen-UR business unit for Livestock Sciences was dismantled.

Intervision for competence building

To meet the demand of the experienced convenors, the suggestion is that part of the total grant should be reserved for supporting the participation of the convenor in intervention groups. An incentive for experienced convenors to keep their motivation for it, could be, to turn their active participation in previous projects, into a positive threshold for the assessment of new submissions.

Collective knowledge dissemination

Already in the R&D programme it was concluded that the value of the collective website, (since 2004), along with the practical assistance offered to develop articles and put them on that website, could not be emphasised enough. In the evaluation of Bartels BV (2008) it was highly recommended that this activity should receive further enforcement – although the website might be better managed by an "independent" central point, instead of a Wageningen-UR business unit.

Actually, the government has tried to end the funding by 2013, because such surrounding structure should not rely on permanent support by the government. In line with this policy the government had already raised the weight of the assessment criterion 'Effectiveness of the dissemination of knowledge and experience ' to 3-fold (table 1). However, there was no "spontaneous" development of any serious alternative and, with reluctance, the government funding to Wageningen-UR was restarted in 2014.

General discussion and conclusions

Although the implementation of the government tender regulation for farmers' knowledge network groups has extended to about 540 groups (2013), there is no record of any significant research about the fundamental decisions that were made. The evaluations that were performed (Bartels BV, 2009; Blokland *et al.*, 2013) did not address the framing of the conceptual formula. For example:

- There has never been any evaluation to what extent knowledge networks appear in practice as "cooperations in innovation" incorporated in "knowledge developments outside institutes".
- The status, and the public responsibilities of the project convenor have never been specified, as a "free actor" in leading and facilitating a knowledge network group, which is so highly subsidized that it is legally seen (according EU laws) as a public institute, installed by the government.
- There is no record of any substantiated research about any investment supports direct business gains from increased competitiveness, due to the participation in knowledge networks.
- The justifications and effectiveness of the grant reduction to 70-80% of the project execution budget (incl. the costs for the convenor) has never been substantiated.
- There is no record of any substantiated research about the relationship between a "quality project plan" in the initial project assessment and a "quality project execution" in practice.

The discussion relies therefore mainly on personal information from practices. The largest supplier of project leaders (DLV) estimates e.g. the average external supports or direct business gains at 0-5% - and their projects are usually commerce-driven. The motivation is that participating in knowledge networks is fun and interesting to do, but the results consist of knowledge, available for all. Project usually do not provide direct business advantages to the participants and cannot be protected from use by others, just like any other type of schooling. For the same reason, external businesses are not interested in specific investments. The collective results of all the projects, however, have contributed substantially to the innovativeness and competitiveness of the Dutch agricultural sector as a whole.

In conclusion: the activities of farmers knowledge network groups as such are not innovative activities in the legal perspective; they are knowledge developments outside institutes. The only aspect of the activities that is innovative as such, is the development of the project plan, for which the plan designer should be able to claim intellectual property rights. However, the knowledge development in the project may well lead to a subsequent innovation. This is confirmed by the fact that additional grant applications were done several times for consecutive innovations (see also poster IFSA 2014, WS 2.9). Nonetheless, the conceptual formula for knowledge development is an innovative instrument. Related to the fact that the farmers' activities are basically knowledge developments implicates also, that there is no direct interference with the competitiveness of the farms.

In both evaluations (Bartels BV, 2009; Blokland *et al.*, 2013) it is suggested, that incentives should be implemented to improve the quality of the submitted project plans. In neither evaluation it is discussed however, why there should be a "quality assessment" of the project plans in the first place, since the project plans may be adapted completely during the project execution, based on "advanced insights".

Why not e.g. assess the quality reputation of the project convenors, based on previous experiences? Or why not e.g. include an element of "lottery" (above a threshold quality), so all project ideas or plans that are "not bad" have more or less the same chance to pass? In addition: if a project plan for "quality assessment" will be remained as a required in the framing (e.g. in the Horizon2020 implementation of the EU-RDP), than the intellectual property rights of that project plan should respected, and it should be specified how the designing of the plan should be funded.

In the second evaluation (Blokland *et al.*, 2013) it is highly recommended that an incentive should be implemented to support the project convenors with the implementation of surrounding intervision groups. In view of the conceptual formula of knowledge network group support it is recommended that inquiries should be made to what extent these surrounding intervision groups could also act as "quality assessment" groups. This would imply that the basis for project granting should be adapted. However, that is in principle not an unsurmountable legal problem.

The status, and the public responsibilities of the project convenor as "free actors" in leading knowledge network groups is insufficiently clear. Their status and job should be recognized specifically, and it should be identified what the appropriate sources are for funding their job. In the current situation it is confusing that the project convenors are paid directly by the (subsidized) participating businesses, but their job is basically public – due to the high subsidy percentage involved.

In practice the question "How to deal with subsidy percentage reduction?", is an incentive to creative financial administration. Creative accountancy agencies will be able to find (legally allowed) ways to deal with the financial administration of the gap between official project costs and actual grant. The current reduction to 70-80% of the project execution costs works in effect as positive discrimination to the larger accountancy agencies, who can easily absorb the remain-

ing 20-30% in their company financial buffer. The conclusion in the second evaluation (Blokand *et al.*, 2013) that this remaining 20-30% is paid twice by the government is unsubstantiated (not even by the evaluation itself).

An incentive that is often used in other cases by the government is requiring that farmers should administrate the hours that they spent in a project. This incentive was rightly not chosen in this situation, because this is another incentive for creative administration, which can easily be absorbed. Since farmers are not employees their time administration is not restricted by any request of proof.

The best stimulation of active farmers' participation is however, requiring that a certain percentage of the grant is invested in activities by the farmers (or their employees), expressed in terms of explicit deliverables. It is unclear why this incentive is not considered so far. Since the assumption that the project results intervene with business competitiveness will probably not hold in research, this incentive could well be recommended.

Final notes

Two examples of knowledge exchange network groups are discussed in IFSA 2014 Workshop 2.9: "Greening the CAP" (abstract and article included in the proceedings).

About the author

Already during the 1990^s, the author was involved with the co-creation of some preoperational work for the thesis of Wielinga (2001) about living networks. In 2007-2010 she was tender regulation specialist inside the Regulation Service in the Netherlands for agriculture and nature projects. Since 2010 she has worked both as expert and as a convenor in several operational knowledge exchange network projects. She also has experience as evaluator in the EU-FP7-KBBE programme.

References

Blokland, P.W.; C.J.A.M. de Bont; A. van den Ham; & H. Prins (2013). Leren in een praktijknetwerk. Evaluatie regeling Praktijknetwerken. [Learning in knowledge exchange network groups. Evaluation Regulation Knowledge exchange network groups (in Dutch)]. Lei-nota 13-030, The Hague (33 pp)

Bartels BV (2009). Evaluatie Regeling Praktijknetwerken. [Evaluation Regulation Knowledge exchange network groups (in Dutch)] Netherlands (93 pp) http://www.netwerkimpuls.nl/impulspdf/evaluatiepraktijkregeling.pdf

EC Commission Regulation N° 1857/2006 of 15 December 2006 on the application of Articles 87 and 88 of the Treaty to State aid to small and medium-sized enterprises active in the production of agricultural products and amending Regulation (EC) No 70/2001

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:358:0003:0021:en:PDF

EC Council Regulation N° 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2005:277:0001:0040:EN:PDF

EC Council Regulation N° 1257/1999 of 17 May 1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF) and amending and repealing certain Regulations

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999R1257:en:NOT

European Commission (2014). Horizon 2020. The EU Framework Programme for Research and Innovation. http://ec.europa.eu/programmes/horizon2020/h2020-sections

Government Gazette (Staatscourant – 2013); 12 december 2012; Openstellingsbesluit LNV-subsidies. [12 December 2012; Call decision of the Government subsidies for rural development (in Dutch)] http://wetten.overheid.nl/BWBR0032443

Government Gazette (Staatscourant – 2007); 14 februari 2007; Regeling LNV-subsidies. [14 February 2007; Regulation of Government subsidies for rural development (in Dutch)] http://wetten.overheid.nl/BWBR0021281

Kroon, van der S.M.A.; E. ten Pierick; J.J. de Vlieger; G.B.C. Backus; & R.P. King (2002). Social capital and communication. LEI, The Hague; Report 7.02.08; ISBN 90-5242764-x

Leeuwis, C.; - with A.W. van den Ban (2004). Communication for Rural Innovation: Rethinking Agricultural Extension. 3rd retitled edition, Blackwell Publishing, London; ISBN 0-632-052-49-X

Michiels, F.C.M.A. (2007). Hoofdzaken van het bestuursrecht. [Principle issues of administrative law (in Dutch)], Kluwer, Netherlands; 220 pp; ISBN 9789013033403

Ministry of Economic affairs (Agriculture) – Regulation Service (2007). Brochure 'Praktijknetwerken voor veehouders, netwerk mee in 2008!' [Brochure 'Knowledge-practice networks for livestock farmers, bring your network in 2008!' (in Dutch)]. Rijksdienst voor Ondernemend Nederland (RVO)

Ministry of Economic affairs (Agriculture) – Regulation Service (2007). Brochure 'Regeling LNV-subsidies, Praktijknetwerken veehouderij' [Brochure 'Government subsidies for rural development: Knowledge-practice networks in livestock farming' (in Dutch)]. Rijksdienst voor Ondernemend Nederland (RVO)

Wielinga, H.E. (2001). Netwerken als levend weefsel: een studie naar kennis, leiderschap en de rol van de overheid in de Nederlandse landbouw sinds 1945. [Networks as living tissue: a study of knowledge, leadership and the role of the government in the Dutch agriculture since 1945 (in Dutch –summary in English)] Dissertation, Wageningen University, 398 pp.

Wielinga, H.E.; & M. Vrolijk (2008). Language and tools for networkers. IFSA 2008. WS:6-04 (11 pp) http://ifsa.boku.ac.at/cms/fileadmin/Proceeding2008/2008_WS6_04_Wielinga.pdf

Wielinga, H.E.; B.W. Zaalmink; R.H.M. Bergevoet; F.A. Geerling-Eiff, H.C. Holster; L. Hoogerwerf; & M. Vrolijk (2008). Networks with free actors; encouraging sustainable innovations in animal husbandry by using the FAN approach (Free Actors in Networks). Wageningen UR, The Hague