SHIFTING ROLES IN EXTENSION

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ABSTRACT

Assistance to farmers with technical know-how comes in many ways. Some talk about agricultural extension, others about advisory services. Throughout Europe farmers are embedded in a great variety of knowledge systems, which are changing over time. In this article, the Author reflects on the different roles that extension has had in the past, as well as on current trends. These services deal with knowledge. Also the concepts of what knowledge actually is and changed, although today different meanings are being used simultaneously. This makes “knowledge” a quite confusing concept. This reflection is based on the PhD study of the Author, as well as on several researches about the Dutch agricultural knowledge systems. Some relevant conclusions of the 20th European Seminar on Extension Education, held in Finland in 2011 have been added as well.

Key words: Extension, Advice, Knowledge, Innovation.

EXTENSION AGENT OR FARM ADVISOR?

The word extension has been first used in the United Kingdom, where universities were supposed to extend new knowledge to the public. The French translation “Vulgarisation” literally means: making it common. The Dutch word “Voorlichting” suggests that someone with a lamp goes in front to lighten the path. All these terms suppose that there is someone who knows (the extension agent) what someone else needs to know (the farmer).

The word farm advisor comes from the British tradition. This term gives more value to the farmer, who is not an ignorant person who should be told what to do, but an independent entrepreneur who seeks advice to enrich his/her capacity to take decisions. The Germans use the word “Beratung” (giving advice) in this same sense. Rivera (2001) observes that the term extension is more common in systems where the state is providing services to

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79
farmers, whereas in privatised systems people talk about advisory service providers. Indeed, since the privatization of the Dutch extension service in 1990, the word 'extension' is not being used anymore, and the Department of Extension Education at Wageningen University, one of the first in Europe, changed its name into 'Department of Communication and Innovation Studies'. The difference is more than semantic. It refers to different roles people are supposed to play. Digging one level deeper, also the concepts of what knowledge actually is all about are different. This paper highlights some of the mainstream ways of thinking about agricultural extension, farm advise as well as the underlying concepts of knowledge, that have played a significant role in European agriculture after the Second World War. Most illustrations will be drawn from the Dutch experience, not only because I am most familiar with it, but also since government investments in the agricultural knowledge and information system (AKIS) have played a significant role in the growth of the Dutch agricultural sector, which has become the world's second largest exporter of agricultural products.

TRANSFER OF TECHNOLOGY (ToT)
After the famine in the II World War, food security was top priority in The Netherlands, just like in the other war affected countries in Europe. Massive assistance came in from the USA through the Marshall Aid programme. Farmers had to learn how to use tractors and other imported machinery. Government gave high priority to extension, for teaching farmers new and improved farming methods. Also research and education received much attention: the “Research – Extension – Education Triptych” was seen as one cluster, governed by the Ministry of Agriculture and Fisheries. Investments in knowledge were an important element of the policy. Farmers should not receive direct subsidies, but act as entrepreneurs. Conditions should be created in which an average family farm could earn a reasonable income. Price policy with guaranteed bottom prices for essential food products, and improvements in the physical infrastructure were some of these conditions, just as access to appropriate knowledge. Science should find out what is best for the average farmer, and extension and education should extend that knowledge to farmers and the new generation.
In addition to research on farm technology, scientists got interested in the question why some farmers were faster in adopting new techniques than others. Rogers (1962) developed his model of the diffusion of innovations, showing a curve with innovators, early adopters, early majority, late majority and laggards. This implicitly assumed that the innovation was good, and being a laggard was kind of stupid. Later on this attitude was called the 'pro innovation bias', when it was found out that sometimes farmers could have good reasons not to adopt. Throughout the world, the Transfer of Technology approach has been dominant for many years. It was the leading principle in the Training and Visit System, imposed by the World Bank in the '80 and '90 in many developing countries. Extension agents were sent out with clear and simple messages, to be transferred through contact farmers who should teach their communities. Science finds out what is best, and knowledge equals the objective truth and the best way of doing things. Extension should extend this knowledge to the target audience.

ASSISTANCE TO DECISION MAKING
The Dutch agricultural policy proved to be very successful. Within ten years the farmers produced more than the national consumption. The next step was to enter the world market of agricultural products, by producing larger quantities with a good quality and a low price. This involved a major transformation of the farming sector. Small family farms with mixed production did not have a future. Farmers had to choose: either to enlarge and specialize, or to stop farming. This added a new dimension to the role of the extension worker. Now there was not just one best way: farmers had more options. They could obtain advice about requirements and consequences of each option, but they had to make the choice themselves. Van den Ban (1970) redefined extension as “assistance in decision making” and stressed the importance of communication skills and programming of extension activities in the interest of the target audience (Van den Ban and Hawkins 1996). In this approach, it is not only scientific knowledge that counts. Farmers' experiences, opinions and conditions should be taken very seriously as well. Many farmers are experimenting all the time. Often extension workers extend the experience from one farmer to another, as well as to researchers who try to find out why certain practices work so well.
In the sixties and seventies the Dutch government extension service developed into a dense network with regional offices, as well as linkage agencies based within the research institutes and experimental stations. The service maintained close relationships between farmers, researchers, educators, but also with policy makers and the food industry.

It is important to mention here that farmers' organisations had become very strong in that period. Apart from agricultural extension, government had also invested in community development, for making farming communities receptive to change. Farmers' organisations had been given much responsibility, and gradually the role of the Ministry of Agriculture became predominantly serving the sector. In the steering community of farmers' leaders, policy makers, scientists and captains of the food industry there was a strong consensus about the way to go, and it had the power to create conditions for Dutch family farms to flourish. This power reached also Brussels, where the former Dutch minister of agriculture, Sicco Mansholt, had become the first Commissioner of agriculture of the European Community, where he was expected to repeat the success story of the Netherlands at the scale of Europe.

PARTICIPATORY APPROACHES
In the seventies and eighties development workers in tropical countries encountered a different reality. Modern technologies that were successful in the USA and Western Europe were not applicable for most small farmers. Instead, often a few privileged entrepreneurs took advantage, and denied others the access to knowledge and resources. This increased the gap between the rich and the poor. The Transfer of Technology approach, where innovations would trickle down from progressive farmers to the others, failed to bring progress. The issue of power relationships came to the foreground.

One response was to start looking for technologies that would be appropriate for farmers with little access to external resources, like artificial fertilizers, improved seeds and breeds, and credit. This required more intensive two way communication with local communities, and appreciation for indigenous knowledge. The
other response was empowerment. Assistance to farmers should lead to a stronger position towards other stakeholders in the production chain, such as traders and processors. This is the origin of participatory approaches, involving e.g. farmers in the decision making processes, and stimulating them to organise themselves. Now it was not only scientific knowledge that counted: also the knowledge and experiences of the audience should be taken seriously. Good solutions should be the result of two-way communication.

**AGRICULTURAL KNOWLEDGE AND INFORMATION SYSTEMS (AKIS)**

The Transfer of Technology approach suggests that knowledge flows in one line from research to end users. Being aware of the limitations of this linear thinking, scientific interest shifted from the diffusion of innovations towards the quality of knowledge systems. A system has properties that cannot be explained by adding those of its components. A knowledge system brings forth useful knowledge if its components are properly connected. Unequal power relationships hamper crucial connections, because the more powerful stakeholders are not being forced to take others seriously.

Constructivism, as a philosophical school of thought, appeared to be helpful to understand knowledge processes better. Knowledge is a construct of reality. Individuals build their own knowledge overtime, by adding experiences to the knowledge they already had. Knowledge transfer is impossible. Information can be transferred, after which people adjust their knowledge. This is why the term AKIS (Agricultural Knowledge and Information Systems) became commonly used. Research generates data and interprets these data into information. If many people share the same meanings of information, this can be called shared knowledge. Knowledge emerges from interaction (Röling 1995, Engel 1995).

This way of thinking became popular in the end of the eighties. In The Netherlands this also happened to be the time that a political decision was taken to privatise government agencies, including the agricultural extension service. In order to maintain the strength of the system, the service was split. The regional offices with agents visiting farmers (“first line extension”) were privatised. The liaison offices (“second line extension”) were strengthened and
centralized as the “Information and Knowledge Centres”. They should take care of the coherence of the Dutch AKIS, by keeping farm advisors, researchers and policy makers informed of the latest developments.

THE KNOWLEDGE MARKET
The wave to privatise government agencies was part of the 'New Government Movement', with US president Reagan and British Prime Minister Thatcher as important exponents. Governments were seen as too heavy and ineffective. They should take an example in successful enterprises. They should go back to their core business: policy making. Instead of sharing responsibilities with civil society, government should limit itself to setting the rules for the market. Knowledge became a product, to be produced by research, sold by advisors and consultants, and bought by users such as farmers. The knowledge market should become ‘market driven’. Instead of the ‘technology push’ from the period of Transfer of Technology, advisors and researchers should deliver what clients are asking.

There were quite some themes for extension or research that had value for society, but no clients to buy. For example, farmers were not keen to pay for knowledge about environmental pollution control or animal welfare. For those themes government should behave like a client in the market, paying for products like research programmes and extension campaigns.

For Dutch policy makers the shift towards market thinking in the nineties felt as a relief. Before, major decisions were always taken in consensus with the farmers’ organisations. This was relatively easy in the period of growth, while people had a strong belief in science leading the way. Gradually it became clear that the intensive production system had its side effects as well, in the form of pollution and overproduction at European scale. In the eighties there came a point in which the public did not accept it anymore, and the role of the Ministry of Agriculture had to change, from stimulating production towards containing the damage. Now interests were not parallel anymore. If the stakes are high and interests diverge, it is hard to reach consensus about true knowledge. Moreover, science did no longer produce the answer to all problems. Every stakeholder could mobilise his own scientists
to defend his point of view. Knowledge became a weapon. Farmers’ organisations abused the consensus culture to delay painful but necessary measures.

In this atmosphere the idea that knowledge was no longer the truth but just a product was very welcome. Stakeholders, including policy makers, now just could buy the knowledge they wanted. For the extension system this had serious consequences. Extension workers who were used to serve farmers free of charge now had to charge for every hour of advice, and make sure to reach their targets. This pushed them into the quick wins and the standard advices, at the cost of more innovative and risky issues. Moreover, there were competitors in the market and knowledge sharing was not so obvious anymore. The IKC’s, that were intended to keep the knowledge system open, now were seen by their superiors at the Ministry of Agriculture as reservoirs with experts to draw on to write policy papers. The function of the liaison, connecting all stakeholders with each other, was no longer considered to be so important. If the market would find these intermediary structures important, it would take care for it.

Privatization of extension services became a big issue throughout the world. Many government led services were privatized (England, Switzerland, Poland by half, Hungary, etc.). Services led by the farmers' organizations remained longer (France, Denmark, some German States), but gradually had to act more commercially as well.

FACILITATING NETWORKS FOR INNOVATION

In The Netherlands, the market did not take care of the coherence in the agricultural knowledge system. Moreover, the privatized advisory service DLV had a hard time to sustain in the competitive market where many other advisory service providers were active as well. At present, in 2011, the central organization does not exist anymore, while seven business units continue as independent enterprises. The remnants of the IKC's have been integrated in the Ministry of Agriculture, that lost its separate status and is now part of the Ministry of Economy, Agriculture and Innovation. Researchers complain that they have to spend a considerable part of their time acquiring funds instead of doing useful research. The themes are determined by the providers of funds, mostly government or European Union, which are quite far away from the daily practice in farming.
However, farmers keep on farming and developing. They always had their networks and they still have. In the last decade, there is a growing recognition for the importance of such networks for the innovative capacity of the farming community. Several research programmes made use of such farmers’ networks to test new practices at farm scale. Initiatives like the ‘Dairy Cattle Academy’ went further and provided a platform for farmers and farm advisors to learn and develop jointly with researchers. The role of the ‘innovation broker’ receives attention: agents who can bring supply and demand of knowledge together (Klerkx et al 2009).

A special case was the experiment “Networks in Animal Husbandry (2004 – 2007)”. Farmers were asked to present themselves as a network with an innovative idea. The program provided them with a researcher or advisor as facilitator, to guide the search and learn process and to link them with the actors they needed. Some 120 networks have been assisted (Wielinga et al. 2008). The approach was so successful that the Ministry decided to convert it into a regular subsidy program. Today, this program includes assistance to small and large networks in all agricultural sectors. In these network approaches the market concept of demand and supply loses its value. If all partners contribute to the process of finding new solutions, all are both producers and users of knowledge; knowledge emerges from interaction. What counts is the capacity of the network to identify treats and opportunities, and to mobilise relevant actors for developing appropriate solutions. Knowledge is more than know-how: it is the capacity to respond to changes in the environment.

CONCLUSIONS

Although in this article history was reviewed in big jumps, some major shifts in the role of extension became visible, as well as different perspectives on the way knowledge should be understood:

- Extension as Transfer of Knowledge - knowledge is the best way, validated by scientific research;
- Extension as assistance in decision making - knowledge is insight in choices, based on relevant experiences;
- Extension as facilitating participatory processes – knowledge is a weapon in power struggle;
- Extension as a broker in knowledge systems – knowledge is emerging from interaction;
- Extension (advisory service) as a commercial activity –
knowledge is a product;

- Extension as facilitation of networks for innovation – knowledge is the capacity to respond to changes.

Today, all varieties of extension and advisory activities can still be found somewhere in Europe, as became clear in a meeting of professionals in extension, last September in Finland (Wielinga 2011). The network perspective is coming up as a theme, although the institutional settings in which most extension and advisory services are not yet conducive in most case to experiment with new forms of cooperation in order to create relevant knowledge together. Still remains much work to do for professionals in the field.

REFERENCES


