Not all extensionists are the same

Analysis of different groups of extension workers involved with CATIE IPM/AF (NORAD) Program in Nicaragua and the changes that occurred as result of the interactions.
The Regional CATIE IPM/AF (NORAD) Program

The Regional CATIE IPM/AF (NORAD) Program is an initiative which began in 1989 to strengthen national Integrated Pest Management (IPM) capacity in Nicaragua. The Program consisted of three phases. In the third phase, which began in 1999, the Program worked in IPM and agroforestry with around 7,000 farm families, 300 extensionists, 60 specialists and 70 decision-makers from about 70 Nicaraguan organisations.

The Program’s methodology consisted of simultaneous linked cycles of workshops for groups of specialists, extensionists and farmers, who participated in training based on crop growth stages, aimed at improving their decision-making capacity in pest, crop and tree management.

In order to carry out and coordinate the training activities at a national level, the Program encouraged the formation of regional groups organised by theme or by crop, which were made up of members of organisations working in each region, and of groups of national-level specialists. These groups formed the central pillar of the Program’s work, and were in their turn coordinated by a committee known as the National IPM Committee (CN-MIP).
What is this leaflet about?

This leaflet contains a brief analysis of the differences between the extensionists who worked with the Program, and how these differences led to different changes in the extensionists' work with farmers.

What is the objective of this study?

In the process of facilitating farmers' access to ideas and information we often talk about extensionists as if they were all the same. In reality, as one woman farmer put it "not all extensionists are the same." In this leaflet, we try to present some aspects in which the extensionists who participated in the Program's work differed from one another, how each interacted with the farmers they worked with, and what the results of these interactions were. Our objective here is to interest readers in the social diversity of extensionists, and raise awareness of the importance of taking this diversity into account in the design and evaluation of extension programmes, in order to make our work more effective.

How was this study conducted?

We contacted about 50 extensionists from different organisations which participated in the Program's work. We went to visit the communities they worked in with them, we shared their office-based work environment, and we held semi-structured interviews with them, spending a day with each extensionist. We found that the extensionists had different styles of intervention, which we characterised into three large groups.

Our analysis suggests that different groups of extensionists had different degrees of knowledge and experience, as well as different attitudes when they began working with the Program, which influenced their degree of impact in the communities in which they worked. The most important factor for achieving a high degree of impact seemed to be changing extensionists' attitudes to farmers and their knowledge.

This helped us to put the Program's results into context, at the same time as providing detailed information to guide future work and contributing to other analyses of the Program's work.
What were the different groups of extensionists that we found?

We characterised the extensionists into three big groups according to their styles of intervention: facilitating extensionists, training extensionists and information transfer extensionists.

**Facilitating extensionists**
viewed their role as that of exchanging knowledge and experience with farmers, of supporting the organisation and local initiatives, and of asking freely when they did not know or did not understand what was happening either in the community or in the crop.

**Training extensionists**
saw their role as that of training farmers and providing follow-up to their training. So training extensionists rarely asked farmers questions when they did not understand. For these extensionists, if the farmer “doesn’t do things, then you have to draw his attention to this, but tactfully [with care]”. When training extensionists had problems in the field, they tended to place the blame on the farmers.

**Technology transfer extensionists**
saw their role as that of transferring technologies. They viewed their work as that of making recommendations and of getting more farmers to adopt these. When they were accompanied by someone wanting to ask the farmers questions, these extensionists intervened and answered themselves instead.

Sometimes we found all three styles of intervention in the same organisation. However, the facilitating extensionists were more common in non governmental organisations (NGOs) which worked in popular education with local extensionists. Training extensionists worked in NGOs which offered traditional training, and information transfer extensionists worked in organisations offering private technical assistance and in private companies, and which promoted the use of ‘packets of technology’.
How did the facilitating extensionists see farmers?

The facilitating extensionists felt that each farmer was different and that each had his or her own experience. They thought it was always possible to learn and to teach in farmers’ communities. This perception was principally due to the fact that these extensionists had had positive experiences in the past, or that they had grown up in the countryside among farmers. Their attitude to farmers meant that they tended to organise events where farmers could exchange information, and to support their organisation and local initiatives.

Facilitating extensionists explained:

“You shouldn’t arrive at a farmer’s place and tell him ‘Do this’ because farmers have more experience. It’s better to tell him ‘Let’s do this’ or to ask him ‘How did you do it?”

“I show them how to sample for pests, but farmers have shown me other things, things you don’t learn from books or training sessions, but with people who are actually doing them. I have gained a lot of experience with these people, and their abilities, as farmers belonging to farmer groups, are very high.”

The facilitating extensionists did not follow the methodologies and technologies promoted by the Program strictly, instead they innovated, adapting them to the context in which they worked. For example, they adapted what they had learned with the Program to other crops, given that, according to a (woman) extensionist farmers grow everything, not just the crop in which the training was given.

Facilitating extensionists’ objectives were flexible. They told us that their main reason for participating in the training offered by the Program was to gain ideas on how to get everyone in the community involved, and to help farmers achieve a quality harvest.
How did the training extensionists see farmers?

The training extensionists had a positive view of farmers, but felt that they had had "good and bad groups of farmers". These extensionists said that they preferred to work with 'special' farmers who responded more: young farmers, farmer leaders or farmers who were already part of a farmers' organisation.

Training extensionists explained:

"I work with this group because they catch on to what I want to put across quickly. They are young and more open to change, and the leaders, in particular, are smart people."

"I like it best when it's not necessary to say what has to be done, when they all agree and when the community supports the work we are doing."

The training extensionists showed a lot of interest in learning about new methodologies and technologies. However, they were not very flexible in their use of these, and did not adapt what they had learned (for example, they did not alter times, practices in the field or evaluations) to meet the needs of different groups, such as women who were not able to read and write.

Extensionists from this group said that their reasons for participating in the Program were to "learn" about participative methodologies for IPM/AF implementation in order to reduce the cost of production, to avoid the use of pesticides and to increase harvests.
How did the technology transfer extensionists see farmers?

The technology transfer extensionists felt that farmers should adapt not just to the methodologies and technologies offered, but also to how the extensionists worked. Their view of farmers was well defined, since they felt that farmers' characteristics were 'innate' – as were those of extensionists. Technology transfer extensionists seemed to be convinced that the 'technological packets' that they were offering were the best option for farmers, so that after they had been working in the communities for a while, 'good farmers' would adopt them. Farmers were considered here as receivers of technology.

Technology transfer extensionists explained:

"A good farmer generally has ideas about experimenting. I like it when they aren't lazy, that is to say when they follow the recommendations."

"The best groups are receptive to technology, they do what you suggest without waiting to be given things free."

"The farmers who stay working with me are the ones who are most active, those who most like the way I work. They are usually more interested and they put more of what I show them into practice. Farmers in communities where the work doesn't go well are not usually members of farmers organisations."

Technology transfer extensionists saw their role as that of transferring "the most appropriate possible" technologies to achieve a greater level of adoption at community level. These extensionists viewed the level of adoption of the technologies proposed to communities as a measure of the success of an extensionist.

The main goal of technology transfer extensionists within the Program was to gain access to new technologies "that work". Several said that their goal was not to "get more environmentally friendly" or to "use a lot of chemicals" but instead to find solutions to specific problems.
What changed after the training with the Program?

**AT FARMERS’ LEVEL**

**The facilitating extensionists**

The facilitating extensionists achieved a higher degree of participation from the women in mixed group training sessions, as a result of the practical nature of the methodology and their visits to the field with farmers during training sessions. These extensionists said that during the gender workshops they learned more ways of encouraging women to participate. They also said that evaluating data in the field was a simple way of showing farmers how their productivity had increased as a result of using IPM and agroforestry practices.

**The training extensionists**

The training extensionists said that the farmers they worked with had changed to growing their crops more ecologically. However, farmers who were in the process of getting organic certification for their crops adopted IPM techniques faster than did other farmers.

**The technology transfer extensionists**

The technology transfer extensionists achieved better communication with farmers. The identification of pests and diseases during training sessions helped them to “give better recommendations”. However, extensionists from this group went from only giving recommendations to promoting more experimentation and to resolving problems together with farmers. One extensionist commented, for example, “we are more participative now.” Technology transfer extensionists also recognised that several farmers had begun to manage their crops by phenological crop stage after the training.
AT EXTENSIONISTS’ LEVEL

The facilitating extensionists

The facilitating extensionists widened the network of extensionists whom they could ask questions of or do exchanges with. The also made links with specialists from different areas and obtained access to up-to-date written information. In some cases, facilitating extensionists applied the Program’s participative methodology to other areas such as cattle management. IPM was also included in the annual action plan of various organisations where these extensionists worked.

The training extensionists

Training extensionists began to organise events in a more participative manner, for example arranging farmer exchange visits and exchange visits between different communities. They had access to up-to-date written information and also managed to improve their degree of communication with extensionists from other organisations and with the Program’s specialists. IPM ideas also diffused within their organisations because several of these extensionists began to train other members of their organisation in IPM/AF.

The technology transfer extensionists

Technology transfer extensionists began to do experiments with farmers and to solve problems with them. They also began to be more able to identify pests and diseases in order to be able to describe these to farmers. They had access to written materials such as IPM magazines and bulletins, and they began to exchange information with other extensionists and to communicate with IPM specialists, widening their sources of information. In this way they began to access specialist information networks, contacting different organisations according to their needs. At the level of their organisations, these extensionists began to replicate the participative methodology in events organised for their colleagues.
What changes were there in the training styles used by extensionists training farmers?

The facilitating extensionists

**BEFORE:** Training based principally on farmers' experience

**AFTER:** Training based on farmers' experience, on experiments and on the analysis of field data.

**Result:** Farmers gained greater confidence in IPM/AF.

The training extensionists

**BEFORE:** Training based on formal education and on the extensionist's experience.

**AFTER:** Training based on experimentation conducted together with farmers.

**Result:** These extensionists began to use more flexible methodologies and to make fewer recommendations to farmers.

The technology transfer extensionists

**BEFORE:** Training based on pre-determined packets of technology.

**AFTER:** Training based on observation and monitoring conducted with farmers.

**Result:** These extensionists began to use more horizontal methodologies to make "better recommendations" to farmers.

Further support for these changes came from the following changes which occurred in all the extensionists' work - facilitating, training and technology transfer extensionists - as a result of participating in the Program:

**BEFORE:** Little or limited exchange with extensionists from other organisations.

**AFTER:** Formation of an information network between and among extensionists.

**BEFORE:** Few links with IPM specialists.

**AFTER:** Contact and links with national IPM specialists.

**BEFORE:** Limited access to written material on IPM.

**AFTER:** Better access to written material on IPM.
In their words: What did the extensionists say?

The facilitating extensionists

"The methodology is excellent; I now use it even in cattle rearing. In the action plan for this year I encouraged the use of the methodology and I've made it my job to encourage the use of IPM. I trained the team, and they've even contracted me to give an IPM workshop in another organisation, and they're going to pay me. I like the methodology because if a farmer presents his data, rather than me presenting mine, that catches the interest of all the others."

The training extensionists

"The coffee we are working in is three years old and the farmers are a new group, but they've made great strides. Before, the extensionist directed everything, now the [methodological] tools [we use] encourage the farmer to participate and we use more live materials."

The technology transfer extensionists

"The thing that has been most useful to me is the identification of pests and diseases because that's what you use most in the field to make recommendations. When I'm not sure, I check through the information from CATIE and I ask the other extensionists and farmers. There is also better communication between extensionists and farmers now."
What factors influenced the changes promoted by the Program?

Changes at farmer level:

- Farmers in the process of obtaining organic certification for their products were easier for the extensionists promoting IPM/AF to work with, since they needed non-chemical options to control pests and diseases, and they were prepared to experiment. The farmers’ organisations which these farmers belonged to also made it easier to get the information to more farmers and to achieve the changes.

- Farmers who did not belong to farmers' organisations dealing with the marketing of their produce took longer to make changes towards more ecological systems.

Changes at extensionist level:

- Extensionists who had had positive experiences with farmers or who grew up in rural areas were better at facilitating the process of change, and achieved the objectives of the Program more closely.

- Extensionists with less positive experience with farmers had fixed perceptions of farmers. After training, their perceptions changed (for example, they began to believe that farmer participation was possible) though there were fewer changes at the level of IPM practices. Farmers changed more when their extensionist was a facilitating extensionist or a training extensionist than when their extensionist was a technology transfer extensionist.

- The lack of stable employment for extensionists in some NGOs and in businesses offering private technical assistance reduced organisations’ ability to achieve change in farming communities.
Factors related to the Program:

- The training methodology of the Program, which encouraged exchanges and experimentation, was one of the most common intrinsic factors promoting change, both for extensionists-farmer relationships and for relationships between extensionists. It helped extensionists to understand that implementing IPM does not just depend on technologies, but also on the way in which teaching and learning take place, and on the relationships between those involved.

- The lack of monitoring of extensionists in the field, the excessive number of forms to fill in and the poor availability of written material on basic grains and vegetables limited change at extensionist level.

External factors:

- The existence of alternative markets for quality (organic) produce encouraged farmers to form organisations to access these markets, and stimulated the implementation of IPM/AF practices by providing an important economic incentive.

- The availability of credit in the form of chemical inputs or seeds to promote 'packets of technology', pesticide subsidies, and unstable prices, either individually or in combination, limited farmers' adoption of IPM practices.

- The policy of searching out and promoting alternative markets turned out to be one which also effectively promoted the adoption of IPM practices. The policy of promoting farming based on off-farm, external inputs turned out to be one which limited the adoption of IPM.
What does this study tell us?

In this study, we identified three groups of extensionists according to their perceptions, the characteristics of their professional career, and the way in which they interacted with farmers prior to participating in the Program's training. These three groups of extensionists had different levels of knowledge and experience with IPM/AF. This suggests that different extensionist populations need to achieve different changes in their ways of working in order to achieve the Program's objectives. Some needed to reinforce their knowledge and methodological experience, whereas others needed to begin with a change in their attitude towards farmers.

So each group made different progress depending on their characteristics prior to the Program. The facilitating extensionists, for example, managed to adapt and innovate the participative methodologies and the IPM/AF technologies with groups of farmers, both women and men, whereas the inhibiting extensionists learned to apply new participative methodologies, but did not always manage to get women farmers to participate.

Finally, this study also shows us that factors which constrained some extensionists often turned out to be opportunities for others. For example, the fact that there was nowhere that all the farmers could meet in one room in rural areas was for some extensionists a challenge to teach directly in the field, whereas for others it was a factor which limited their impact.

Why gather this sort of information? How can we use it?

Once we understand the goals, knowledge and experience of the actors in a programme – that is, their social diversity – we can better understand the changes that have taken place. We can also gain insights into which factors encouraged change and which constrained change. This means that we have a clearer picture of the impacts of a programme than we would have via the use of qualitative studies alone, as well as being able to provide information to guide future work. Social diversity studies can provide valuable information on various other aspects of development work, including baseline studies, programme design, and impact evaluation, and can help us to keep in mind which factors influence farming.
The Wider Lessons Studies

This leaflet forms part of the Wider Lessons Studies (WLS) which consist of:

- A qualitative study on how and why the CATIE IPM/AF (NORAD) Regional Program has had an impact on the different levels of participants who were involved in the Program's work and
- An economic analysis of the costs and benefits of the Program.

The main focus of the research into the process of change has been on explaining and understanding why the changes observed have taken place, and so the research has been qualitative, not quantitative, in nature. This depth of understanding has also fed important information into the assumptions made in connection with the calculations of economic efficiency, since economic efficiency is only one of the indicators of the impact of IPM projects. The WLS were conducted by CABI Bioscience and the University of Hannover in collaboration with Program members.

The following publications are available in connection with the WLS:

**The following short illustrated leaflets are available in hardcopy:**
- Different families: different IPM
- Not all extensionists are the same
- Decision-makers: a factor in the change to IPM
- Economic cost-effectiveness: an important criterion in IPM

**The following longer documents are also available in electronic form by e-mail:**
- Social diversity and differentiated impacts on stakeholders of CATIE IPM/AF (NORAD) Program
- An economic cost-benefit analysis of CATIE IPM/AF (NORAD) Program.

To obtain copies of these please contact:
CABI Bioscience (glopez@cabi.org) or CATIE (catienic@mipafcatie.org.ni)

A version of the economic cost-benefit study will also be available in English, as a Pesticide Policy Project publication, from the University of Hannover.
(contact: waibet@ifgb.uni-hannover.de)