

Needs-based Training in Agriculture

Cora Schibli¹

In Nicaragua women seldom attend training courses on integrated production (IP). Efforts to integrate the partners of course participants have so far not been successful. In a study by CATIE/MIP-AF² together with a number of NGOs, the training needs of various “women types” were determined. NGOs are now applying these results in their work and specific efforts are being made to integrate women in areas which are meaningful.

1. Subject content of the IP training

The first step is the familiarisation with the basic concepts of the technical aspects of agricultural integrated production:

1. How do ecosystems function?
2. Who are the biological players in agriculture?
3. What is natural pest control?
4. What are pest management strategies?

In concrete terms this means that, during training courses, farmers carefully observe and identify individual insects, plant diseases, small animals and weeds. They study their life cycles, behaviour and occurrence and try to relate these to plant symptoms. They learn to regularly collect data on the occurrence of pests and on

the plants' state of health. During the groups' training meetings which take place approximately every two months with the trainer, comparisons are made of the field data and damage threshold levels are set. At the end possible approaches to solutions are discussed.

On the social level, each family member's rights and duties regarding integrated production are discussed. The fact that toxic pesticides are only seldom used in integrated agriculture means that the family's health increasingly improves. Many practices are labour intensive and have to be done manually. For example, coffee plants have to be cleaned of remaining beans. Different family members can easily do such tasks. In this way no extra costs are incurred and the family profits from its own labour.

2. Proportion of women in IP training

Context

According to various sources, approximately 20 % of the women took part in IP training³ during the last four years. Some of these women are single; that is, they themselves make production-related decisions, implement them or employ someone to do so. Others are equal producers and partners of male participants. Others represent their husbands. There are great qualitative differences in the participation of these women, depending on their function and personal interest.

The proportion of female participants in the courses should be increased for the following reasons:

- Integrated production affects all family members and is a uniting and low-risk approach. This applies more to female producers who often also bear the responsibility for the whole family, than to male producers.

¹ The author is an agricultural engineer and worked for seven years in development cooperation in Nicaragua, four of which were in research and further training within the project CATIE/MIP-AF.

² CATIE “Centro de agricultura tropical de investigación y enseñanza” is an international institution involved in agricultural research and further training in subtropical and tropical regions. It has numerous programmes in various Central American countries. The programme CATIE/MIP-AF deals with the promotion of integrated production and agroforestry and is based in Nicaragua.

³ Informe intermedio, proyecto CATIE/MIP-AF (NORAD) Managua, Nicaragua 2000

- Dissemination of knowledge is more likely when both sexes are involved. Women share knowledge more readily and in different ways than men.⁴ When both sexes have access to information, therefore, the multiplier effect is used more effectively.
- In Nicaragua many farmers and farm labourers emigrate to seek work elsewhere. In addition there is the phenomenon of “migrant father”.⁵ This means that women are more likely to remain in one place than men, which is of great significance for the long-term observation of ecological relationships.

In 1998 CATIE/MIP-AF launched a research study to combine the new emphasis on agroforestry with gender aspects. The proposal was modified and extended in various national forums. Finally the study was developed into a joint project of CATIE/MIP-AF and three NGOs who were also interested in conducting the study in their areas.

Hypothesis and aim of research

Efforts to increase the quota of women in the courses had thus far been unsuccessful. Therefore this aspect was integrated into the research tasks.

The aim of the study was thus the identification of individual variable⁶ factors which significantly determine the training and further training needs of women. Numerous studies have already been done on the participation and motives of men in agricultural training. Other studies look at single women households, where the woman is the provider and head of household. These cases are not included in our sample.

⁴ Results of the study “Percepciones de hombres y mujeres sobre los arboles del cafetal” by C. Schibli, CATIE/MIP-AF, Managua, Nicaragua 2000.

⁵ This concept is used in Latin America in sociology to describe men who live with a woman for a certain length of time, father children, and then move in with another woman to repeat the procedure.

⁶ The factors knowledge, work, decision-making, interest, needs, personal preference and visions of the future were examined. Factors were deliberately chosen which could be influenced by the individual herself.

Methodology

The study was done in the three regions where most of the coffee is produced. The communities to be surveyed were chosen in consultation with the local NGOs of these regions. The following conditions had to be met:

- Families owning their own land with small to medium surface areas and cultivating between 0.7 and 7 hectares of coffee in agroforestry.
- Families with at least one male and one female decision making adult.

In each community 20 families were questioned; in each family one woman and one man with decision-making authority were questioned. This totalled 120 interviews, covering the equivalent of 1 % of the coffee-producing families in these regions. The interviews were done simultaneously by a male and a female officer. The family members were separated acoustically and spatially during the interviews.

Results

During the course of the investigation three factors were identified which were relevant to the women’s training and its success: The labour involved in coffee cultivation; know-how of the technical aspects of planting and producing coffee; and involvement in decision making in the economic and agricultural aspects of coffee cultivation.

Women are involved in almost all areas

The interviewed women work 50 to 89 working days per year in coffee cultivation. This includes not only tasks directly related to coffee, but also the cultivation of shade-providing banana trees or the harvesting of firewood as a product of agroforestry. 81% of the women work sporadically and approximately 27% work all the year round in coffee cultivation. There is no clear division of labour between men and women. The latter undertake all tasks, except two which are regarded as dangerous: cutting trees and application of pesticides. The transportation of firewood and its processing depend on the technological level of the family. If a means of transport or a power saw is available, the men do the work. If the wood has to be transported on the heads or if only a machete is available, the work is left to the women.

Venecia (Esteli)
Taller focal - 10/06/99



Participantes discutiendo el cálculo del equivalente en córdoba de los jornales que trabajaron en el cafetal



Finca Los Acuerdos con café, quaba, higuera, matasano, cedro, plátano, malanga, una quebrada y una pila



El cafetal de una finca con higuera, malinche, aguacate, guanacaste, sangregrado, quinos y quaba

Women know less than men

42% of the interviewed women and 84% of the men have medium to good knowledge of the technical aspects of planting and producing coffee. 15% of the interviewed women (and 60% of the men) attained the

highest points on a point scale; in other words, they have a very good knowledge. Without exception these women had obtained their knowledge either through working as day labourers or having been taught by their

fathers. Men obtain their knowledge primarily from other producers or through training. Most women can always call on know-how which they would otherwise never use, and apply it (for example, when a husband is ill or is working as a labourer out of the country).

Women are involved in decision-making

When the question “who makes which decisions?” is asked, a discrepancy was observed between the men and women’s perception. Of the 23 economic and agricultural issues listed, the women stated that over 59% were decided on jointly. In other words, men alone decided on 41% of the issues. The men in the same families stated that 75% of the issues were decided on jointly.

The varying concepts of men and women on “joint decision making” gave occasion and impetus for workshops on this theme and confirmed the necessity of this complex yet valid gender comparison.

Group affiliation

In the next step the results obtained were combined and used to identify types of women who are relevant to training and further training.

1. The first group with a share of 30% is characterised by women who are interested in learning more and can translate the acquired knowledge into practical applications. The acquired knowledge flows into the decision-making process and is eventually expressed in improved management of coffee cultivation.

2. The second group with a share of 10% is made up of families with good internal communication. The men share their gained knowledge with their families. It is also possible that the woman has a good basic knowledge because, for example, she comes from a farming background and also has sons who are at a working age.
3. The third group (20%) also consists of families with good internal communication and mutual respect. The men in these families are open to the opinions of their wives, even if they do not understand much of the subject. They involve them in the decision-making procedure or at least inform them of what is happening in the field.
4. The women in the fourth and largest group (40%) are either housewives or have an additional occupation (teacher or shopkeeper). The coffee production is their partners’ concern. It could also be, however, that they are oppressed and uninformed, and do not have the possibility of freeing themselves from this situation.

Motivation enables almost everything

A number of other common features could be identified in the five cases where the women achieved the highest knowledge points:

- All work in coffee cultivation and obtained their knowledge by their own efforts in outside plantations or in their fathers’ home.
- All five emphasised that they enjoy the work in the field, i.e. coffee cultivation, and that they would rather work outside than in the house. They attend training courses, or say they would immediately

Group affiliation of the women according to their training and further education

Group affiliation of the women	Work throughout year in various tasks	Coffee cultivation knowhow	Participate in agric. and economic decisionmaking	% of estimated cases
1	Yes	High	Yes	30%
2	Little/no	High	Yes	10%
3	Little/no	Low	Yes	20%
4	Little/no	Low	No	40%

Source: Family interviews 1999 in study “Percepciones de hombres y mujeres sobre los árboles del cafetal” C. Schibli, CATIE/MIP-AF, Managua, Nicaragua 2000.

attend them if they had the opportunity to do so (even though her partner would not permit her to attend, as mentioned by Dona Isabel Estrada of Los Alpes in Jinotega).

- The women's motivation to work, learn and know more is not only because of economic necessity, but also because of their personal interest and pleasure in fieldwork. Often these women are only able to remove the countless obstacles in their way by great effort and perseverance.

Conclusions

The 30 % of the women of the first group have the best prerequisites for successful training because they are capable of optimally putting the acquired knowledge into practice, despite not being family heads. They should be included in all integrated plant protection and practical field courses, together with the female and male family heads and side by side with the producers.

Even the second and third groups represent a good potential for further training, although they perform none or only a few of the agricultural tasks. As they are part of the decision-making process, however, they should continually increase their know-how and thus improve the basis of their decisions.

In order to reach housewives and women in other occupations, mechanisms will have to be integrated in the training to benefit the whole family, which in turn benefits the agroforestry system.

Recommendations

All women who either work in coffee cultivation or are involved in its decision-making process, should personally and specifically be invited to the same meetings as their husbands.

During the whole year the female course participants should make periodic observations in their fields and undertake other repeatable tasks. They should be given priority in data presentation and in the implementing of certain practices. They should also be allowed to participate more and more in the experimental plots, so that their active involvement is ensured on all levels.

In families where the wives sometimes cannot profit from the training, new mechanisms should be developed to improve the communication of the male participants with his family or the community. Events could be organised after course hours, with an exchange of experiences between producers. Alternatively, family days could be arranged when the meaning of training and further education for the family is discussed. This can be reinforced with tasks which the participants can only do with the help of family members. New mechanisms should also be sought to promote such integration, without directly confronting the women with production techniques.

There are, however, situations where women are suppressed, or live in ignorance and uncertainty and therefore are unable to take part in decision making or training. This could be an individual situation determined predominantly by the partner, or by the environment (relatives, acquaintances). Such families – both men and women – primarily need “support” other than that offered by the CATIE/MIP-AF project.

3. Practical implementation

Recognising women's needs

The formulated grouping of the women serves as a guiding principle for extension workers to avoid failures on the part of the participants. Basically, most women themselves know where they stand and what is good for them, but they do not have the possibility to voice an opinion. We in the first instance, therefore, provide them with the opportunity to express themselves. Generally, however, the needs of the different women are already known amongst the so-called informed members of the communities. Nurses, agricultural extension officers and teachers are aware of the family circumstances of most of the villagers. A third possibility are simple interviews with the participants' families.

Implementation of the results by the participating NGOs

The study was conceptualised by two local NGOs, FUMDEC⁷ and IMC⁸, together with the CATIE/MIP-AF project and implemented with two other NGOs. The research study confirmed the work done by FUMDEC, but new aspects will be integrated. According to the expert Dora Valenzuela who is responsible for the study, “We fetch the women where they are. We speak to them at home (wherever possible we send a female person), inviting them to an orientation event and briefly finding out their needs (educational background, literacy level, power play in the house). The men, too, are involved during this visit and – if necessary, so is the whole family – to discuss the importance and seriousness of the orientation event. In this way the entire family makes a compromise by committing itself to enable the women to participate. We strongly motivate the women, because often they are of the opinion that production is men’s business. When, however, they realise that the invitation is directed to them personally, they begin to be interested.”

At the orientation event an assessment is made as to which training course comes into question for each individual woman. There are also courses on role distribution and rights and duties of every individual, with the intention of promoting the self-confidence of the women and of sensitising the men. This forms the basis for other courses because if the woman wants to remain in the family, she can only develop further if there is a greater awareness on the part of the man. A condition for our basic courses is that men and women of the same families attend them together, although often they work in different groups. We have made good experiences with this.”

The IMC in Esteli has a different concept. It is less feministically-oriented, but open and prepared to try changes. Franklin, an officer responsible for the study said: “We will need to revise our strategy paper based on these results. We were not aware of the fact that 30% of the non-single women were fully involved in the production process, and a further 30% were partially involved. These women do not attend our courses. From now on we will directly and personally invite and motivate them to attend the courses next to their partners, our course participants. Based on this study we can explain to them and their partners why their active participation and training is of great importance for their families.”



⁷ “Fundacion para la mujer y su desarrollo economico y comunitario” is an NGO which has for nine years been engaged in the economic development of women and their representation in communities, particularly in the rural areas of the Matagalpa department.

⁸ “Instituto mujer y comunidad” is active in integrated community development in the Esteli department.