Beyond the PTD approach

Having gone through the October 1988 issue of ILEIA on Participatory Technology Development and some of the references mentioned in it, one should be very pleased to find that farmers' participation in rural development is receiving more and more attention, even from mainstream scientists. Every development worker with his or her heart in the right place should applaud these bottom-up strategies.

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Undoubtedly Participatory Technology Development will contribute to the refinement of sustainable agricultural systems. Yet we feel there is something lacking in the PTD approach, or Farmers Participatory Research (FPR; Farrington and Martin, 1987). To understand our concerns it may be relevant to explain that we have been working for the last four-and-a-half years in an isolated mountainous area in the western part of the island of Sumba in eastern Indonesia. Together with the other staff of the Propelmas Rural Development Project, a small church-related NGO, we have been struggling to find ways to assist local farmers to improve their living conditions.

Is Development of Technology enough?

Reading the issue of ILEIA on PTD, and thinking about applying this method within our own project we face several questions. The major problem the new approaches try to solve is how to improve the effectiveness of agricultural research 'in meeting the needs of small, resource-poor farmers. But should not the central problem be how to improve the effectiveness of our efforts to improve these farmers' living conditions? Better research is only one part of this. The one-side problem definition colours PTD as well as FPR and results in the strong technology orientation of both approaches. Why is it that we always think that other technology (either modern, appropriate, locally adapted, or ecologically sound) is The Answer to the problems of small farmers? Social, political or economic constrains are frequently more limiting than technological constrains.

An example of the complexity of rural poverty

From our own 'resource poor' environment we can give an example of the complexity of the obstacles facing small farmers. Propelmas tries to find ways to stimulate farmers' involvement in activities that will result in more food and/or income. One of these activities is growing green gram (Phaseolus aureus). Green gram is a crop that can be readily consumed or marketed. Farmers in this area enthusiastically join in this activity. They form small working groups, since they are used to co-operating for the purpose of cultivation. The farmers groups thus formed provide a good basis for further organisation. From the evaluation of this activity many technical problems became apparent. Yields of the new crop are quite low. Farmers cultivate green gram on steep hill sides and they do not prepare the soil thoroughly before planting. According to their indigenous technical knowledge these steep hills are the most suitable sites for green gram. If they plant in moist, relatively flat fields the leaves grow abundantly but there are only few pods. Further inquiry shows that there is another advantage for the farmers in cultivating green gram on these seemingly unsuitable sites. The crop grows on these sites with hardly any soil preparation, giving the farmers adequate results with very little labour input. This is very important as their labour is found to be the most constraining factor during the season in which green gram is grown as farmers are obligated to participate...
in traditional groups that co-operate in working the rice fields. An arrangement, which was
formerly part of a feudal system, requires that the poorer farmers provide their labour to work
the fields of farmers with more resources (cattle and land). Sanctions for not participating in
this 'voluntary' provision of labour are to be found in the social, religious and political
spheres, and would have serious consequences for one's daily living conditions (availability of
food, protection, ceremonial and ritual services, help from others in non-agricultural
activities). If the PTD approach were applied in this case, would researchers only consider the
factors of production and indigenous technical knowledge or would they also take into
account the social background of the labour constraint?

Indigenous knowledge

This example illustrates the importance of analysing all aspects of farmers' reality when
discussing poverty and ways to overcome it. Farmers' own knowledge is, we agree fully, the
most important factor in studying this reality. But again why limit ourselves to their technical
knowledge as seems to be done in the discussion on ITK, Indigenous Technical Knowledge?
Within Propelmas we do explicit research on indigenous ways of farmers' co-operation and
organisation and on farmers' strategies to cope with food shortages. Through this research we
try to gain a better understanding of how to help the farmers improve their living conditions.
Perhaps in our project area the need for this type of research is greater than in other areas,
where farmers work more independently and are more commercially orientated. But even then
there is more to indigenous knowledge than ITK suggests.

The necessity of conscientisation

It is already a long time ago that Paulo Freire spoke of the culture of silence. But until today
the concept has not lost its relevance. Especially in isolated areas where local traditions are
still very strong, the capacity of small farmers to critically analyse their situation and think of
it objectively as something that can be altered through their own action, is very limited. Under
these conditions a few visits by research scientists asking the farmers their major problems
might not give the expected result. A precursor to any development activity is to bring
farmers to a level of awareness and self-confidence, which will facilitate active participation.
Apart from this aspect of effectiveness of our interventions, many NGO's, including ours, see
it as one of their principal objectives to contribute to the building of awareness and self-
confidence among small farmers as a prime prerequisite to a long term development process.

The need for community organisation

In the articles of the recent issue of ILEIA little attention is paid to the need of small farmers' organisation. Probably because the advocated approach to technology development sees the individual farmer as the major partner for discussion. Yet once the technology has been developed, how will farmers adopt it? Will the technology itself be convincing enough so that they will not need organisational support in applying it? Will the local political system not pull them back to the old ways? It is beyond the scope of this article to discuss the rational of group formation or the building of local organisations (we can refer to an excellent discussion in Esman and Uphoff, 1984). In our area farmers' groups are useful for the following reasons:

a. they enable effective communication between our project's very limited staff and a
   relatively large number of farmers;
b. they help to better organise agricultural production which is still largely being done in small neighbourhood groups, and to co-ordinate it with other important activities such as house building and cultural ceremonies;

c. they increase the opportunity for more equal participation of farmers in sharing ideas and inputs, rather than concentrating them in the hands of a few progressive farmers and/or feudal rulers; and

d. they help to build up negotiating power on behalf of the farmers in dealing with traders and the local government.

The institutional issue

An important issue referred to in the discussion on PTD as well as FPR is the relationship and the interaction between farmers, extensionists or facilitators, and researchers. The major line seems to be to increase direct contact between researchers and farmers, even to the extent that research scientists are supposed to have intensive problem-identifying discussions with farmers. We must question the replicability of such an approach in terms of sheer numbers. There are not even enough extension workers, let alone researchers, to interact closely with the farming community in developing countries. In eastern Indonesia some of the most effective extension work is being done by a number of local NGO's. Problem-identifying, conscientisation, and discussion on possible actions take place between NGO field staff and farmers. During the last few years the concept of a consultative service having close links with researchers and providing technical advice to local NGO's has been formulated and is now taking shape in the form of a separate foundation. Researchers and scientists with a 'PTD attitude' have already been helping local NGO's by participating in field visits and farmers' discussions. But the area reached by the NGO's is limited, as is the number of researchers committed to village-level work. When it is already difficult to make local government extension staff aware of the necessity for a more farmer-oriented approach and to acknowledge that farmers can be sources of expertise, the task of converting research institute staff seems unachievable.

Propelmas' Approach

The criticisms of the PTD approach presented above are not derived from a theoretical analysis but rather are rooted in the experiences we have had (and the mistakes we have made) working on a small rural development project for nearly five years. The project area of the Propelmas Rural Development Project is, by Indonesian standards, very sparsely populated, only 30 inhabitants per square kilometre. Nearly all its inhabitants are small, resource poor, farmers living at subsistence level. Maize, cassava, and rice are the main food crops. Yields are low and external inputs are minimal: slash and burn cultivation is predominant. Soil fertility is declining because of decreasing fallow periods. Government intervention in this area has been limited to some road construction, the building of a small village clinic (without staff) and schools, and tax collection. Money required for paying school fees and taxes has to be 'produced' on the farm; a portion of the yields of crops and livestock is sold on the local market where prices are extremely low. As is usual in such remote and isolated areas, local traditions are very strong and society organisation follows strict hierarchical, feudal lines. Strong dependency relationships with former feudal rulers limit the freedom of farmers to act to improve their living conditions. In this difficult area the Propelmas Rural Development Project was set up by the Protestant Church of Sumba in 1976. Propelmas staff consists of six Indonesians assisted by two Dutch colleagues. The strategy used by Propelmas is different than the PTD approach. Nevertheless for purposes of
comparison we have attempted to describe our approach using the PTD's five step model (Haverkort et al., 1988) as far as possible.

A. How to get started

Propelmas has been working in a small area in rural Sumba for more than twelve years. There has been a long process of trial and error to find an appropriate way to start activities in a new village. At present, when Propelmas assistance is requested by a local community we start the process of co-operation between village and project by visiting the village to do a simple survey: what are the activities of the farmers, are farmers working together in groups, who are the official leaders, who are the informal leaders, what are the main problems according to the farmers, what are the sources of conflict? A questionnaire is used to collect the basic data whereas other information is gathered through informal interviews using a checklist. From the result of the survey we decide whether there is scope for a fruitful working relationship with the village or group and try to choose people who seem to be promising as key persons for activities. These key persons can be characterised as people who are able to co-ordinate a group of farmers, who are interested in development activities and seem to be honest in their intentions, not only hoping to gain personally from 'the rich project'.

B. Finding things to try

Together with these key persons Propelmas tries to come into contact with a group or groups of farmers and asks them to call a formal meeting. Each group or groups may consist of 8 to 15 farmers, either all male or all female farmers. (From our experience, women farmers are much more active in development activities if they form their own groups.) If the farmer and their key persons are willing and able to organise such a meeting, Propelmas presents the results of the survey and explains its approach. The farmers explain how many people are interested in development activities and how they have organised small working groups. At the end of this meeting and based on the information available at that point the farmers and the project will choose an 'entry point' activity to start with. Our experience shows that it is more useful to start at a relatively early stage with a concrete activity, because this results in more and better information than what results from only discussing problems and possibilities with the farmers. A number of conditions has to be fulfilled to make an activity suitable as 'entry points':

1. the activity should attract the attention of the poor farmers and respond more to their interests than to the interest of the farmers with more resources;
2. the activity should provide a first step to farmers organisation;
3. carrying out the activity should not require many inputs or knowledge from outside, and should be relatively simple;
4. the activity has to bring a quick result to its participants;
5. it has to produce good possibilities for follow-up activities.

In our project area growing green gram has proved to be a good entry point activity.

C. Trying out

While carrying out this activity we learn a great deal about the participants, their organisation, their problems and needs. There is an opportunity to discuss issues more informally with the farmers. The activity itself shows who is really interested and who is not. During the meetings
of the groups that co-operate in growing green gram (for example) other activities can be planned. Several of these groups can meet together and form a larger organisation of farmers. The process of conscientisation is facilitated through meetings among farmers and between farmers and project staff, not as exercise in itself but rather as an implicit component in all activities. After the first 'entry point' activity Propelmas staff makes an evaluation and decides whether or not co-operation with a particular farmers group is to be continued. Important in this evaluation is whether there is a growing understanding and co-operation among farmers and between farmers and the project.

D. Sharing results

When co-operation between Propelmas and farmers groups is continued, other and more complex activities are carried out together. These may include activities outside agriculture, such as child health clinics and small courses on food preparation and preservation. When these activities include new technologies or otherwise require knowledge from outside, Propelmas staff itself teaches and capacitates as far as possible. If necessary we try to find expertise from other sources. From the beginning, learning from each other is an important element in the relationship between farmers and project staff. An important part of all teaching and capacitating work is discussions with regard to co-operation, leadership, joint decision-making, and conscientisation. Most farmers are only used to working together in the traditional way, in groups that are formed for one occasion only, or for certain types of activities, while benefiting leaders more than ordinary farmers. The road to a farmers organisation which functions in a democratic way is long and difficult.

E. Sustaining

In the Propelmas approach the most important part of this step is evaluation and organisation. Activities as well as functioning of organisations should be evaluated and upgraded. Sustaining also includes the training of group members as local cadres for certain activities, such as child health clinics or cattle fattening. In this step -after a few years of activities- the farmers organisations are further formalised. In this process of increasing institutionalisation of farmers' groups Propelmas at first assists and actively intervenes when there are problems. Eventually Propelmas withdraws and the farmers organisation becomes independent. Propelmas continues to provide assistance but as an external advisor and facilitator only. Trying to fit the Propelmas approach into the 5 step model of the PTD obscures some of its major elements. Therefore it is appropriate to give a summary of the approach in our own terms:

1. Propelmas' assistance is requested, staff visits the village, (first informal contact with individual(s) requesting the assistance).
2. Gathering of information, survey and discussions, analysis.
3. First assessment both within the project as well as together with farmers in a formal meeting.
4. Entry point activity.
5. Evaluation of entry point activity.
6. Follow up activities, increasing complexity and scope; each activity evaluated.
7. While expanding activities, a process of organisational strengthening takes place resulting in formalisation of farmers' organisation.
8. Propelmas withdraws from participation actively in the organisation.
Conclusion

The complex strategy that is necessary for effective rural development will vary according to local conditions but should combine technology development with conscientisation and community organisation. Farmers should eventually be supported politically and in executing activities by some sort of local institution. The strategy must be flexible enough to encompass activities outside agriculture in case the most severe constraint in fighting poverty does not lie in agricultural practices but in other spheres. The processes involved should be iterative with increasing complexity of development activities undertaken by farmers and increasing organisational strength of farmers groups. The ideal strategy for working to improve farmers lives can only be found by bringing together the knowledge and experiences of farmers, field workers, and scientists. In this effort we must use tools that are designed not as products of our own preconceptions but rather according to the realities in each area.

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