



Farmers exchanging PTD experiences.

Sharing the PTD approach

The objective of PTD is to ensure that small-scale farmers genuinely participate in establishing their technological requirements and develop their capacity to carry out experiments in the field. This method of participation enables peasant families to achieve a more sustainable rural development. After gain-

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ing experience in PTD among self-sufficient farmers using few external agricultural inputs, CEDEPAS (Centre for Ecumenical Promotion and Social Action) a Cajamarca NGO, decided to apply the methodology with farmers using high levels of external inputs to grow potatoes. The experiences of two groups of small-scale farmers, who exchanged information about the research methods applied for PTD, indicate that experimenting farmers can be useful promoters of such an approach.

Learning and teaching

In 1997, CEDEPAS began applying PTD methodology in the Magdalena district, a self-sufficient area. The replica of PTD training provided by ILEIA coincided with the migration of peasants to the so-called Yunga (areas below 2300m) to work as labourers in the rice fields at the beginning of the dry season. The first PTD cycle began with only five families because of the experimental nature of the work and the heavy workload of the promoters. These families completed an entire PTD cycle in one year.

Farmers in Magdalena started to discuss the problems of their environment by identifying the natural resources available to them. Four main problems emerged: limited soil fertility, 'Rancha' in potatoes (*Phytophthora infestans*), the lack of pasture land for cattle and endo-parasites in cattle.

In order to further explore the problem of limited soil fertility, staff and farmers constructed a so-called 'problem tree' to describe cause and effect. Areas of possible intervention were pinpointed with a view to finding solutions. In their search for solutions that were within their own resources, farmers decided to plan and implement a field experiment involving the use of cattle dung in potato plantations. This would be applied in different forms: the traditional dry dung core sample, damp dung (kept in a manure heap), and damp dung mixed with straw (kept in a manure heap). The purpose of this experiment was to prove whether an adequate application of manure would increase soil fertility. Apart from other indicators observed during the farming season, yield was the main indicator against which the success of the experiment was measured. The best results were obtained with damp dung, equivalent to a 20% increase in the harvest when compared with the yield achieved using dry dung.

The fact that there were only a few participants enabled staff to closely monitor the entire process and maintain an intensive flow of communication with the farmers. In this way, both promoters and farmers satisfied their interests and learnt from the experiences and discussions. The PTD

instrument was thus studied in depth and its characteristics and peculiarities were identified. The interest aroused by the experiment guaranteed the farmers' attention. Through their observations and considerations, with the help of promoters, they absorbed the whole process and adopted the results.

From farmer-to-farmer

Three farmers from Magdalena who were involved in the experiments were invited to accompany two CEDEPAS promoters. The latter were supposed to introduce the PTD methodology to farmers involved in a project promoting market-oriented potato production in another part of the northern highlands. The purpose of this two-day workshop was to introduce the methodology to other promoters and to start the PTD process with peasant families in the area.

The promoters took along panels with photographic sequences of the first PTD cycle to liven up the workshop. However, during the trip they came up with the idea that the experimenting farmers themselves should demonstrate their experience of the methodology to the workshop participants. Guided by the photos, the farmers from Magdalena did an excellent job. The experience gained throughout the process had turned them into PTD experts. As a result of the enthusiasm and conviction with which they showed how they had experimented with different forms of dung, the promoters attending the workshop were convinced of the viability of the PTD methodology. Farmers realised that the technical results of this experiment were better than with chicken manure, a product that was becoming increasingly expensive to buy. It became clear that the workshop participants were more influenced by the experiences of the experimenting farmers from Magdalena than by the explanations provided by the promoters. This was the more convincing as the experimenting farmers had gone through all the steps of the PTD cycle maintaining a constant dialogue with promoters.

The promotion of this experience convinced many families of the usefulness of the PTD methodology and these are now going through a similar process of implementation and learning. Experimenting farmers are well aware of the positive impact of their experiences on other families.

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