EDITORIAL

Valuing small farmer's expertise

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Man has always tried to improve this livelihood and he will continue to do so. The different social groups thereby design their strategy in view of their own immediate objectives.

Manufacturers, for example, will develop machines, cars, etc. according to plans and will be sure about their outcome. Their product will be the product they wished to create. In a matter of a relatively short time, people can be trained to develop good plans and others or the same to execute them correctly. In such a technical environment much — if not everything — is under control.

Farmers, however, live in a completely different situation. They also plan their work program (f.e. when and how to prepare their fields, when and how to plant, etc.), but they are never sure about the harvest to expect. Indeed, they are always uncertain about the future because they are dealing with ever-changing matters: (1) the weather conditions vary every year, sometimes rains are too late, too heavy, etc.; (2) the fertility of the soil is heterogenous and may decrease if improperly used; (3) pests and diseases may occur and reduce the yield. Farmers have learnt to adapt and live with it.

Results of scientific research in agriculture (machines, chemicals, pesticides) have tremendously increased yields, especially in the North. With only 2-8% of the population left as farmers, enough food is produced in the northern hemisphere.

In the South, where the majority of the population consists of small farmers, progress in agriculture has been very slow. There are several reasons such as the lack of credit and good prices for the agricultural produce. The communication gap between agricultural scientists and farmers is also a serious bottleneck. Agricultural scientists have been educated to analyse problems and then to search for adequate solutions, but do they always identify the real problem? Has the agricultural scientist put the right questions, or even better, has he listened attentively to the farmer? Is the agricultural scientist sure that the farmer wants more yield (higher production), or does the farmer want a more efficient production system (higher productivity)? Agricultural scientists, because of their higher degree of education, often do not value the knowledge of the (sometimes) illiterate farmer.

This is a real shame because small farmers can rely on experience gathered by several generations of farmers. This situation of conflict is often not even recognised to be a problem.

As such, agricultural scientists present solutions which are not adequate to the farmer. For example:
- the replacement of a farming system involving mixed cropping by one or two crops increases labour peaks and weed infestation. Moreover, risks for yield losses due to pests, diseases and erosion also increase.
- monocropping, unlike relay cropping, increases labour peaks at planting and at harvest. In addition, it necessitates storage facilities.

Farmers know why they grow two or more varieties of a same crop (different life cycles result in different periods of harvest), have chosen a certain variety (for own consumption or for sale) or leave trees (to act as nutrient pumps, for animal fodder or to restore faster the fallow, etc.).

This and more, agricultural scientists have to realise before to present to the farmers high input — high risk — high output systems in replacement of the low input — low output systems of which farmers are assured that they are sustainable and always provide produce (low risk).

When agricultural scientists start to value farmer's knowledge, communication between researchers and farmers should improve resulting in solutions which will be much faster accepted by small farmers.

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