

## PRECAD

### Crop research project



### Future challenges for Cinzana Station

In spring 2000, a participatory evaluation was carried out to assess the work of the agricultural research station at Cinzana so far. Three evaluators, from Germany, Burkina Faso, and Switzerland, provided a number of valuable insights.

To begin with, it was confirmed that the station had produced a large number of successful technologies (see [research results](#)). These included the two high-yield and disease-resistant millet varieties *Benkadinion* and *Toroniou*, which are being cultivated in the villages in the station's catchment area on approximately 20% of the total area.

The evaluators noted that more small-scale farmers were not taking advantage of the technical innovations presumably because they perceived that the tests of new technologies in the experimental fields were simply taking place at their farms rather than with their involvement. In view of the withdrawal of state agricultural extension services and the absence of private substitutes, however, the importance of the station for spreading new technologies is growing. In the evaluators' view, it is also imperative to devote a larger proportion of the research to the small-scale farmers' socio-economic living conditions and the resulting production strategies, in order to increase the rate at which new techniques are adopted. This can **ensure that the development and research are better oriented toward farmers' needs and conditions from the very start.**

Another problem involves the sometimes long distances to the three external stations and "antennae" (test fields in the farm environment without a station). Due to the costs involved (vehicles, fuel, time, etc.), supervision of the test fields is sometimes inadequate. The evaluators therefore suggested reducing the size of the intervention area, while at the same time increasing

the number of "antennae," which have so far been successful, so as to provide more scope for better collaboration with the farmers.

As a result of the evaluation, the *Institut d'Economie Rurale*, the people responsible at the station, and the Syngenta Foundation agreed to devote the 2001-2005 phase of the program to technology transfer (see [discussion](#)). The initial steps have been taken, with the *Commission Régionale des Utilisateurs* (CRU), an association of farmers' groups who are the real beneficiaries of agricultural research, having their role as "customers" being enhanced. The CRU is to be helped to formulate its research requirements, to enter into dialog with the researchers, and to help establish goals and topics for research. At the same time, the researchers are being prepared for intensified collaboration with the farmers in developing and testing new technologies.

In addition, the evaluation studied the station's potential for self-financing. Up to now, the Syngenta Foundation has met some 70% of the costs, with the Malian government paying for the remainder, mainly in the form of staff costs and investments in spare parts such as generator motors. Although it will not be possible to achieve complete financial independence in the foreseeable future, and external support will continue to be necessary in order to produce presentable results, the station does have resources at its disposal that might allow it extend its sources of income. Consideration is being given to the use of free areas in the station's grounds for agricultural production in order to produce income and allow the station to finance at least part of its needs. However, it must be ensured here that the development and spread of new technologies is not in any way neglected. In addition, the station's own production must not represent any form of market competition for the small-scale farmers in the area. A marketing study could be carried out to identify which products are lacking in the market, or are still capable of producing sales. This is a considerable challenge for those responsible at the station, since the range of agricultural production is limited in this climatic zone. Producing improved seed is another possible source of income, particularly since the state organization for seed production is unable to produce enough seed at acceptable prices.

Finally, the station also faces the problem of a high fluctuation rate among researchers, who often move on to international organizations and companies.

This results in a poorly developed "institutional memory," particularly since the knowledge produced at the station is not always adequately exploited. It also means that existing knowledge

is not always fully documented, nor is it prepared and made accessible in a user-friendly way. Although there is a library, some data - e.g., for researchers joining the station later - are difficult to find. The station therefore wants to get the best value from its existing knowledge by applying continuous documentation, improved data preparation, and an easy-to-use access system. This will also prevent research topics from being duplicated.

Both the development of measures to increase the station's income and the establishment of a knowledge management system have already been included in the action plans for the 2001-2005 program cycle.