

"Dam" good heroes

by Savitri Mohapatra

A small dam in M'bé near Bouaké, Côte d'Ivoire, represents the inspiring story of unsung heroes who helped more than 300 farming households survive a difficult time when they had little hope.

"The M'bé dam was their only lifeline to survival during the decade-long Ivorian political crisis from 2002 to 2011," said Alain N'Zoromi, operations supervisor at the main research station of the Africa Rice Center (AfricaRice) in M'bé. "The farmers in M'bé were able to grow rice even at the height of the crisis as the irrigation system continued to run and ensure water supply.

"In fact, we did not stop the supply of irrigation water even for a day when the farmers required it," Mr. N'Zoromi added. "But today the dam is in desperate need of rehabilitation."

This is in stark contrast to three nearby dams built at the same time, but that are no longer functioning properly because of poor management, Mr. N'Zoromi explained.

A shining example of cooperation

Irrigation is a community enterprise and, to make it work, all user groups must join to maintain the system together. The goal is to assure a strong sense of ownership and equity among participating members.

The reservoir, which supplies water to the M'bé irrigation scheme, lies on the main research station of AfricaRice. The center and the village communities in M'bé have been sharing the water of the reservoir for rice research and farming.

As part of an informal agreement with the farmers' cooperative and the village chiefs, AfricaRice has been managing the irrigation system in a transparent and equitable manner. It takes care of its maintenance, responds to the needs of researchers and farmers, determines water allocation in consultation with the cooperative, and monitors water use at the center and on the farms to avoid waste.

The successful management of the M'bé dam, particularly during the crisis when most AfricaRice research activities were suspended, is a shining example of cooperation and trust between the center and the villagers.

"We thank AfricaRice for the efficient management of the reservoir water and are very proud of its work," said Kouassi N'Guessan, traditional head of the Mizron community. Mr. N'Guessan leads the 13 village chiefs in and around M'bé.

Benefits of the M'bé dam

For AfricaRice, the presence of a reservoir in M'bé is a boon for research as it ensures year-round water supply for its experimental plots. This helps the center continue its research activities and seed production throughout the year.

The potential impact of the rice research and development activities in M'bé station is huge as it has all the main rice-growing agroecologies (see Fig.1) and can contribute to the

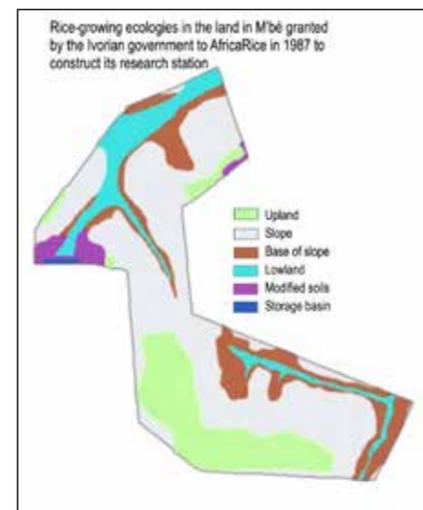


Figure 1. AfricaRice research station in M'bé has all the main rice-growing agro-ecologies.

development of the rice sector in Côte d'Ivoire and neighboring countries.

Similarly, M'bé farmers are assured of two rice crops per year thanks to the stable water supply.

"Our farmers have been able to obtain bumper rice harvests and have become better off," the president of the Rice Farmers' Cooperative (CODERIZ) Coulibaly Issaka said. "They are able to feed their families and send their children to school and pay for medical care."

Life has changed in some of the villages around M'bé, such as in Tabako, where several thatched huts have given way to semi-concrete houses. Also, farmers have been able to acquire tractors and threshers



THE IRRIGATION system in M'bé has degraded due to wear and tear.

further improving their farming practices.

M'bé farmers also benefit from the new technologies and training from AfricaRice. The region of Bouaké now has a thriving rice industry and traders from Bouaké source their rice from M'bé, according to Mamadou Ouattara, a rice processor and vendor in Bouaké.

Urgent need for M'bé dam rehabilitation

The M'bé dam is now more than 50 years old and has not been rehabilitated in a long time. Sediment has started to build up over the years and the drains and canals are not operating as efficiently as before. Also, since AfricaRice suspended its research operations for more than 12 years beginning in 2002, most of the infrastructure, particularly the drainage system, the canals and canal structures, and the field application system and the pumps, has degraded because of poor maintenance.

The inadequate maintenance of the irrigation system is already affecting the timely supply of irrigation water to the farmers' fields in M'bé.

"We used to get water on our farms within two days," explained Mr. Coulibaly. "Now, it takes more than a week and this delay is a major risk to our crop."

He explained that the canals in farmers' fields need urgent attention and appealed for help to line them

to reduce water seepage. In addition, the reservoir is facing challenges of increasing population pressure and climate change.

"It is vital to expand the reservoir so that more farms can be developed," said Mr. Coulibaly. "When it was built, there were only about 60 farmers here with about 4 hectares each. Today, we are 300 farmers and our farm size has been reduced to 0.35 ha for a family of six to seven members. This is unsustainable."

"The canals have become very shallow because of silt and weed growth, making it very difficult for researchers, as we require fields with a proper irrigation and drainage system," said Ampar Vittalaraya Kini, seed systems development coordinator at AfricaRice. "The boom irrigation system that was used for upland research is no longer working and needs to be replaced."

As AfricaRice looks forward to fully resuming its research activities in M'bé, the rehabilitation of the dam is central to its ambitious plans to develop new technologies to boost the rice sector in the country and the Mano River Union.

In view of the strong links between irrigation and agricultural development, the rehabilitation of the M'bé dam will certainly have significant impact on the lives of farming communities.

"For these communities, rice farming is most important as it generates revenue for them," said Amadou Beye, AfricaRice M'bé station head. "Also, different value-chain workers, farmers, mechanics, and millers—are involved in M'bé. So if the dam is improved they will all benefit."

The rehabilitation of the M'bé dam in response to farmers' demand will be a sound and visible investment option to improve the profitability of the dam and boost the food security and socioeconomic status of farmer-beneficiaries in the area, according to Aka Konin, governor of the Bouaké region.

"The rehabilitation will also help generate employment for the village youth, which is a major objective of the local government authorities," Mr. Konin remarked. ■

Ms. Mohapatra is the head of Marketing and Communications at AfricaRice.



CHIEFS OF VILLAGES in and around M'bé show their gratitude to AfricaRice for the management of the M'bé dam water and for the training of the village youth in rice production.