



# INTSORMIL Marketing Strategies Increase Farm Income and Promote Technology Introduction in West Africa

The World Bank's 2006 *Human Development Report* ranks Niger as the world's second-poorest nation. Most of its 11 million citizens live in semi-arid grasslands and survive on subsistence cultivation of millet, sorghum, and other drought-resistant crops. Producers sell their crops in September and October, the peak months of the harvest season, when local markets can be flooded with grain and prices are low. These farmers often must then purchase additional food supplies in the "hungry months" of June and July when food grains reach much higher prices.

INTSORMIL's West Africa Marketing-Processing Project, funded by USAID/WARP, is accelerating the adoption of technology by farmers by increasing farmers' income with marketing strategies in Niger and three other Sahelian countries, Burkina Faso, Mali, and Senegal. The most successful marketing innovation in the region has been the introduction of the "warrantage" system or inventory credit. Another strategy has been to encourage farmers to produce cleaner grain by modifying the threshing strategy. Farmers then can receive a price premium for quality. The marketing strategies have encouraged farmers to adopt



technologies such as (1) water management techniques, (2) moderate levels of inorganic fertilizer and (3) planting of higher yielding, food quality cultivars.

Farmers using INTSORMIL recommended technologies (improved cultivars, inorganic fertilizers and seed treatments) doubled their millet yields in 2003 (see Figure 1). As expected, the yield increase is greatest in a year of adequate rainfall (2003) as compared with a low rainfall year (2002).



In addition to the increased yields due to the use of new technologies, the farmers following the project recommendations also received higher prices for their grain. Why were they able to obtain higher prices for



Traditional granaries in Niger



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their grain? Because they were able to avoid selling at harvest when prices are low and they also received a premium price for grain quality. Both yields and prices contributed to the income increases from the use of the new technologies and marketing strategies in the four Sahelian countries. In Senegal, the price effect was 210%, and with the yield increase, the total effect was a 278% income increase in 2004. This very high gain was due to the collaboration between the Cooperative Malicounda and Yaourt Jaboot. The latter was willing to pay a high premium for the assurance of a clean steamed millet in their yogurt.

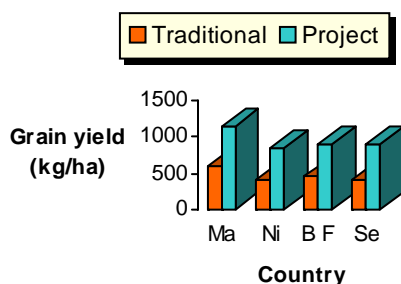


Figure 1. Traditional and project yields of millet for four Sahelian countries in 2003

How were farmers able to take advantage of the seasonal price variation? As noted above, the use of price variation in the warrantage system enables the farmer to benefit from later sales. Cash is made available to the farmers at harvest but the farmer or the farmers' organization waits until later in the season to sell. The grain provides collateral for the credit provided at harvest. When it is sold, storage and interest costs are repaid to the farmers' organization.



The harvest price and the later sales prices for the four Sahelian countries are shown in Figure 2. In addition to the stimulus of the later sale, prices were also increased by the establishment of programs between farmers groups and processors. In Senegal in 2004, when the market price was only 85 CFA, the Malicounda farmers' organization received a price of 175 CFA/kg from Pierre Ndiaye, owner of the Yaourt Jaboot company for providing a more uniform, high quality grain. A new entrepreneur in Mali, Mme Boucoum, President of an association of women processors, produces in her home, millet products such as Moni Kuru (millet porridge), Dégué, Thiackri, Couscous-Bassi and millet flour. Both Mme



Boucoum and other food producers are willing to pay a quality premium for millet grain..

Niger has the lowest income levels and the fewest processors among the four Sahelian countries. There is one high quality processor of millet based in Niamey, Mrs. Cissé Fatchima who owns a firm specializing in infant food. She sells mainly through the pharmacy network and has a contract with the NGO, Doctors Without Borders, for a special food supplement (containing millet and cowpea) for emergency use. She is providing leadership for entrepreneurship in Niger as Pierre Ndiaye has done in Senegal.

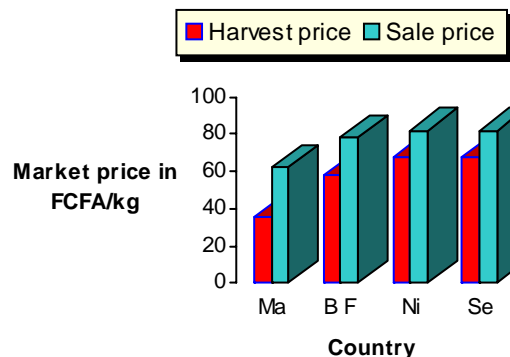


Figure 2. Harvest price and six months later for four Sahelian countries in 2003

The INTSORMIL project is continuing to promote entrepreneurship in the production and utilization of sorghum and millet in the four Sahelian countries by promoting new production technologies and marketing strategies and will build upon lessons learned in the first two years of the project. These lessons include the knowledge that (1) there is a strong association between improving marketing strategies and the introduction of new technologies, (2) the benefits of the warrantage system are obvious and significant, especially in low rainfall years and (3) processors are willing to pay a premium price for a high quality product.

Based on the lessons learned we are expanding the program (involving more farmers) with the goal of increasing farmers' incomes through the promotion of the following strategies:

1. Introducing improved technologies (including improved high yielding cultivars, inorganic fertilizer, improved agronomic practices and disease management techniques)
2. Producing premium quality grain
3. Taking advantage of the seasonal price variation (inventory credit)
4. Increasing the market power of farmers by organizing farmers' groups



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