## PolicyPennings by Daryll E. Ray & Harwood D. Schaffer Farmers' issues and challenges in other parts of the world are different yet similar

Our understanding of the issues facing US farmers is not limited to what we have learned during the course of our academic endeavors. Daryll grew up on a farm in Hamilton County, Iowa, and has family members who are still engaged in farming. In addition, he has the opportunity to talk to farmers during the numerous presentations he makes to farm groups each year.

Harwood, on the other hand, grew up in a suburb that was adjacent to an area comprised of numerous, small-diversified farms. His initial understanding of farming came from classmates and a year he spent working on a mission farm and teaching at a settlement school in Eastern Kentucky. It was the 30 years he spent as a pastor in rural communities in the Midwest that brought him face to face with the challenges US farmers face as they work to earn a living from the land.

Both of us have had the opportunity to travel together to observe farming in Brazil and China as we learned about their farming techniques and the challenges they face. Readers can view the columns on Brazil at <a href="http://agpolicy.org/articles06.html">http://agpolicy.org/articles06.html</a>, February 17-April 7, 2006. The columns on our visit to China and what we learned can be viewed at <a href="http://agpolicy.org/articles08.html">http://agpolicy.org/articles08.html</a>, June 13-July 25, 2008.

Harwood's trip to Guédé Chantier, Senegal is our first opportunity to directly observe and learn about agricultural production in Sub-Saharan Africa. Beginning with last week's column, we are sharing with our readers some of the things Harwood observed and the lessons we learned from this recent trip.

During his visit to Guédé, Harwood had the opportunity to have extended conversations with community members representing all segments of the community, men and women, young and old, schoolteachers, fishermen, herders, farmers, and those who earn their living outside of Guédé. The description of the agricultural challenges that Guédé faces is widely shared by all sectors of the society.

When it was first established in the 1930s, Guédé had a population of around 1,000 and the support of the French colonial government. In those days the harvests were good and the farmers only had to grow one rice crop a year to provide an adequate living for everyone.

With the end of colonialism and an increasing population, farmers began to engage in three crop campaigns a year. It was during this period that the Chinese established an agricultural mission in Guédé. They upgraded the irrigation pumping system, introduced improved seed varieties, and increased the use of the full range of farm chemicals. As a result, production levels increased dramatically.

When the Chinese left and the subsidization of inputs disappeared, the profitability of rice growing began to decline as yields fell and the price of inputs increased. Between the 1930s and today the population of Guédé has increased from 1,000 inhabitants to over 7,000 inhabitants. In the 1930s, with one crop campaign, one hectare supported 1.67 persons for a year. Today, with three crops a year, for each crop campaign, one hectare supports 3.89 persons for a year, placing additional pressure on the ability of crop agriculture to support the population of Guédé.

When asked, the residents all talk about how tired the soil is and their dependence upon fertilizer and other farm chemicals. Because of the high cost of farm chemicals, as well as people dying as the result of the use of farm chemicals, almost everyone Harwood talked to would like to shift to organic or at least low farm chemical production systems.

Farmers spoke of low crop prices at harvest time when they have to sell their crops to pay off bank loans. In addition they have few facilities available in which they can store the grain they produce and have to wait until prices begin to improve before they sell.

Farmers inside the dike are dependent upon irrigation water for which they must pay a per hectare fee. With this cost and the fact that the bank only provides loans for rice, tomatoes, and onions, farmers feel locked into the cash crop cycle that leads to the depletion of soil nutrients and the consequent dependence on expensive farm chemicals.

Farmers who farm outside the dike, closer to the riverbank and flood ground or on the north side of the Doué River have more freedom in the crops they grow and their crop rotation cycle. In addition, the land that is flooded each year gets a fresh input of soil and nutrients on an annual basis.

To tackle these challenges the people of Guédé and Harwood decided to work on designing an agricultural/community development project where the research/work agenda is set by the people in the community, with his role being that of a facilitator who has access to resources and knowledge. We are hopeful that this model of agricultural and community development will be sustainable in Guédé over the long-run and replicable in neighboring communities as Guédé residents learn how to become facilitators.

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