

Reducing vulnerability to drought: The case of Seguenega

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A decade ago, the Sahel region was reeling from the effects of massive drought. Hundreds of thousands of people perished on the dessicated land but the crisis abated as the rains returned. Ten years later, the scourge of drought has returned to the Sahelian zone. Today, as before, the effects of drought are devastating. Nevertheless, there are some positive elements to the story of the current drought in the Sahel. For while the current drought has indeed had a severe impact one can point to cases where its effects have been mitigated by the intervention of long-range development planning. The case we examine below illustrates how vulnerability to drought can be reduced.

THE SEGUENEGA CASE

In the wake of the Sahelian drought of the early 1970s, Africare, which had been active in the drought relief effort, initiated a series of small-scale irrigated vegetable gardening projects in several villages in the Seguenega region of Burkina Faso (formerly Upper Volta). Seguenega, which is located in the north central region of Burkina Faso, has about 125,000 inhabitants and is the country's most densely populated region, with 70 persons per square kilometer.

The earliest and most successful project was initiated at Ramsa under a Lilly Foundation grant in 1975 and the concept soon was expanded to the neighboring villages of Goubre and Mogom. These projects emphasized community involvement in digging wells, planting and cultivating the gardens, and reforestation. By 1980, eight hectares of vegetable garden were under cultivation enabling 300 families in these villages to enjoy improved nutritional benefits from the diversification of their diet, especially during the dry season. In addition, substantial income was generated through the sale of surpluses, enabling many farmers to more than double their normal income.

Growing out of the success of these pilot projects, Africare received a \$5.9 million grant from the U.S. Agency for International Development (AID), to support the

implementation of the Seguenega Integrated Rural Development Project (SIRD). This ambitious, five-year project had several long-range goals and aimed to:

- increase capacity of the Seguenega sector to deliver social services;
- increase agricultural and livestock production;
- improve planning and management capacities of government agencies at all levels;
- increase participation of rural people in project planning, management and implementation.

Africare has provided technical assistance to the Yatenga Regional Development Organization (ORD) which is the lead implementation agency. Activities undertaken in this project are many and have included: village co-operative development, provision of health services and training, young farmer training, adult literacy programs, credit programs, vegetable gardening, rice cultivation, livestock and poultry production, well construction, road development, reforestation and management training. This project is nearing completion after having been extended for an additional year.

As with any project of this size and scope, the different components of the SIRD have met with varying levels of success. In general, however, the results of the project have been positive. The feasibility of dry season cultivation has been demonstrated, income levels of participating families have improved, and the capacity of local governmental agencies to provide services has been strengthened. But perhaps the most telling outcome of this project can be seen in light of the impact of the current drought.

IMPACT OF THE CURRENT DROUGHT ON SEGUENEGA

Burkina Faso is one of the hardest hit of thirty African countries which have been most seriously affected by the current drought. The most severely affected region of the country is Yatenga. Some areas in Seguenega appear to be holding their production and coping with the drought. This appears to be true even after considering traditional seasonal migration patterns. Many displaced persons have descended into the vegetable producing areas, some of which have managed to continue cultivation. Notable in this regard is Ramsa and other villages closer to the now dry White Volta riverbed, where the water table is still accessible. The existence of SIRD-financed infrastructure, including wells, improved roads, and warehouses (which can be used for storage of emergency food aid as well as regular harvests), has reduced the vulnerability of this area to the drought.

In spite of these efforts general crop production has been seriously inhibited by the drought. Harvest yields of traditional rain fed grain crops have fallen precipitously. Thus, despite the success of the SIRD's production of supplemental foods (staple crop production was not