How Akwa Ibom Overcame a Crisis in Cassava Production*

When Akwa Ibom was declared a new state in Nigeria in 1987, this was a dream come true for its more than two million inhabitants, dedicated principally to farming and fishing.

Located in Nigeria's riverine, oil-producing area of the southeast, Akwa Ibom was affected by occasional oil spills, which contaminated both farmland and aquatic life. It was hoped that, as a state, it would receive a larger share of the national budget destined for alleviating problems in oil-producing states, and that the impact of governmental development programs would be greater.

Figure 1. A farmer examines symptoms of the African cassava mosaic disease (ACMD). In Akwa Ibom, Nigeria, this disease wiped out the 1988 crop and endangered the lives of poor people.

Cassava and African mosaic in the new state

Cassava, grown on higher sites, is the only crop that survives the oil spills. In fact, farmer survival in Akwa Ibom depends on cassava; it is their cheapest source of calories, and, together with fresh fish, offers a balanced diet.

In 1988, however, the newly fledged state faced a totally unexpected crisis—a severe attack of African cassava leaf mosaic disease (ACMD), which ruined the state's crop. ACMD manifests principally by wrinkled leaves with white patches, caused by lack of chlorophyll. Thus, the leaves cannot produce the food that the plant needs, which, therefore, establishes poorly, lacks vigor, and yields little (Figure 1).

The epidemic spread rapidly through thousands of hectares, which yielded at less than 2 tons/ha (instead of the 20 to 25 tons/ha expected from improved varieties). The price of gari, a popular cassava product on the West African coast, increased threefold, and famine threatened. The crisis so affected the states's population that the Federal Government declared it as a "disaster". In an attempt to keep prices down and stave off famine, gari was imported from the neighboring states of Cross River and Imo.

Improved varieties: A solution

Cassava needed to recover its place as a basic product to meet future food crises. The State Government therefore requested planting materials from resistant genotypes bred by the International Institute of Tropical Agriculture (IITA), based in Ibadan.

Through IITA, almost 10,000 bundles of stakes of improved clones such as TMS 30572, 30555, 4(2)1425, 50395, and 30001 were supplied to farmers. Each bundle carried 50, 1-m long, stakes. IITA also facilitated the establishment of long-term, cost-effective linkages between the State Government and accredited farms and institutions that had large quantities of improved varieties available. Medium and large-scale farmers imported about 30,000 bundles from Oyo and Rivers States for the 1988-1989 planting season.

This vigorous campaign to promote improved varieties had a large impact: the price of improved stakes, which

* SOURCE: Food Action Media Service (FAMS), IITA, Ibadan, Nigeria.

was 8 to 10 nairas[1] per bundle in 1988, dropped to 5 nairas by 1991, and the price of gari fell from 1 cup per naira to 3 cups per naira in the same period. In addition, farmers did not have to use chemicals, thus avoiding environmental problems.

1. 1988 exchange rate: N20.00 = US$1.00.

The improved, disease-resistant varieties are now available in all cassava-growing areas of Akwa Ibom, and farmers are multiplying them on their farms. These varieties are higher yielding and are also resistant to cassava bacterial blight. Farmers are enjoying a better standard of living. They have enough food and even have surpluses for sale, thus improving their incomes.

The story of cassava in Akwa Ibom is a classic example of development in action: a problem was identified and, through cooperation and concerted effort, a solution was found.

NEW PUBLICATIONS

Proceedings of the first international scientific meeting of the Cassava Biotechnology Network

In 496 pages, this CIAT working document includes about 80 themes from conferences, presentations, and reports of the working groups of the first international meeting on cassava biotechnology held in Cartagena, Colombia, 25-28 August 1992.

The book offers the reader a complete vision of the present status of biotechnology in cassava research, and the implications and perspectives of this methodology for Third World countries. Themes include cassava quality, processing, and utilization; studies on photosynthesis, cyanogenesis, and plant-microorganism associations; policies for biotechnology research; the most recent advances in tissue culture and genetic transformation; methodologies for applying biotechnology in research on cassava physiology, and in the characterization and conservation of its germplasm; and the role of social sciences in the biotechnology of cassava.

CIAT has a limited number of copies available for sale to scientists in industrialized countries (at US$25.00). To scientists from developing countries, copies are sent free after study of each request and on the expectation that these copies will be shared with other interested colleagues.

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El cultivo de la yuca en Ecuador: Su comercialización, impacto en la agroindustria, aspectos socioeconómicos y de organización de los productores

A compilation of presentations made at three seminars on cassava in 1988, 1989, and 1990 in Ecuador. They are grouped into five chapters: Cultivating Cassava, Commercialization, Agroindustrial Aspects, Organization of Producers, and Technological Diffusion.

This 215-page publication was prepared by two Ecuadorean institutions: the Fundación para el Desarrollo Agropecuario (FUNDAGRO) and the Instituto Nacional de Investigaciones Agropecuarias (INIAP). CIAT was collaborator and Ramiro Berástegui was technical editor.

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Cassava Program 1987-1991

A CIAT Working Document No. 116, published in October 1992. The book provides a general review of cassava research and development by CIAT's Cassava Program and collaborating national and international institutions. It refers specifically to the period 1987-1991, when the world's production of the root increased at an annual rate of 2.3% (from 137 million tons in 1986 to 150 million in 1990).

In 473 pages, the publication describes cassava research and development carried out by CIAT and collaborating institutions, the principal results of this work, and future prospects. The book begins with a 20-page summary and is organized by discipline and by special projects carried out cooperatively in different countries of Latin America, Africa, and Asia.