



## Success Story

# Public-Private Alliance Increases Yields & Incomes for Thousands of Cashew Farmers in Coast Province

Kenyan cashew nut farmers in Coast Province are reporting dramatic increases in yields as a result of an initiative spearheaded by the USAID-funded Kenya Horticulture Development Program (USAID-KDHP) and involving more than a dozen private and public sector partners ranging from government research and extension services, to input suppliers, processors, and exporters.

USAID-KHDP began its Coast Province Cashew Productivity Enhancement Program in 2004. While cashew had been an important source of income for smallholders in the region, yields had declined due to poor production practices and failure to control powdery mildew. The average yield had fallen to less than 5 kilograms per tree based on weight of nuts in shell (NIS), whereas a well-managed tree can produce 10-20 kilograms NIS. Domestic production was supplying less than 30 percent of potential demand from exporters and processors.

With few other income options in cashew production areas, cashew growers were experiencing recurrent food security problems. The quickest way to increase incomes for cashew farmers and relieve these food security problems was to increase cashew tree productivity.

The scale of the problem and the scope of the program required to reach thousands of small farmers in often remote areas were beyond the capabilities of one project or program. Therefore, USAID-KHDP formed an alliance with the Cashew Technical Committee, comprising over a dozen public and private sector entities involved in Kenya's cashew sector. Led by the Kenya Agricultural Research Institute's (KARI) field station in Mtwapa, members include USAID-KHDP, the Ministry of Agriculture, Bayer, the Chamber of Commerce, the Coast Development Authority, Action Aid Kenya, Coast NGOs Forum, TechnoServe, Kenya Nut Company, Millennium Management and other processors.

Under the first phase of the program, 120 extension staff received training and technical materials covering pruning, pest and disease control, integrated pest management (IPM) techniques, and a wide-variety of other improved cashew production and postharvest practices.



Photos by Fintrac Inc.

**Ali Ka Pombe, a farmer in Kenya's Coast Province received help fighting powdery mildew disease and his trees are flourishing.**

In turn, these extension agents have provided on-farm training and extension services to more than 5,000 growers throughout Coast Province. The program has also produced extension materials, provided specialized hand pruning equipment for use by tree management teams, and cost-shared the establishment and maintenance of a central cashew demonstration plot and nursery at the KARI-Mtwapa research station.

First phase results were very encouraging. Average yields per tree have increased from 3.5 kilograms to 5 kilograms, with some farmers reporting individual trees producing more than 50 kilograms in 2006.

Ali Ka Pombe, a cashew farmer in Coast Province, watched his yields collapse with the spread of powdery mildew disease. After employing USAID-KHDP's regimen of pruning, weeding and spraying techniques, his ten trees are healthy and he expects his yields to reach 40 kilograms per tree.

"Cashews grow well at the Coast, but disease made it hard and now I have an incentive to plant more," Pombe said.

Technical analysis by KARI, Real IPM, Bayer and USAID-KHDP of the work carried out during the cashew program during 2005-06 shows that regular weeding and mulching around potentially high-yielding trees followed by pruning and timely application of fungicide to control powdery mildew, are essential to optimize yields. Most growers, however, have neither the capital necessary to buy the equipment and inputs necessary to prune and spray their trees, nor the specialized skills to do the work efficiently. To solve these problems, a second phase of the KHDP program was funded and implemented in late 2006.

Phase II is focusing on establishing an integrated production, credit and marketing system for cashew growers. Farmer groups are receiving intensive technical assistance to manage at least 1,000 trees each, with pruning and spraying services provided by three-person "tree management teams" (TMTs) selected by each group from its members and trained by Bayer (East Africa), KARI and USAID-KHDP. Growers are paying for the pruning and spraying service, with the cost financed by K-Rep Bank who recovers the principal and interest on the loans directly from processing companies that have marketing contracts with each group.

At least 80 farmer groups (1,600 growers) are also being trained in farming as a business, including credit and loan management. Program partners K-Rep Bank, processing companies and TechnoServe are providing specialized staff to train all target groups in business management including the terms and conditions of their credit facilities and marketing agreements.

An additional 50-60 Ministry of Agriculture and private sector extension providers are receiving more specialized training in cashew production necessary to support at least another 80-100 target farmer groups.

In order to ensure good recordkeeping, part of the fee paid by each grower to the grower group is covering the cost of a clerk who records all transactions carried out on a group basis, and implements a traceability system in relation to trees sprayed, nuts harvested, and nuts

sold. This group recordkeeping function also forms the backbone of the program's monitoring and evaluation system.

By August 2007, with the completion of Phase II, more than 5,000 farmers will have been trained in improved cashew production techniques. Average yields are expected to more than double (to 10-20 kilograms per tree). Most importantly, the program will leave in place a financially sustainable extension system delivered through various private-sector partnerships (input suppliers, processors, banks), with expanded credit access for small growers from private banks and other lending agencies.



**BEFORE** Powdery mildew disease, when left uncontrolled, decimates the cashew flowers that yield the fruit.



**AFTER** USAID has trained thousands of small Kenyan farmers to fight the disease and cashew production is blossoming. USAID continues to train thousands more farmers in proper pruning, mulching and spraying techniques.

### **Kenya Horticulture Development Program**

KHDP is working in Central, Coast, Eastern, Nyanza, Rift Valley and Western provinces to increase incomes through smallholder production and employment in the horticulture industry. The program is working with more than 15,000 members of 500 smallholder groups in conjunction with 52 private and public-sector alliance partners.