

Results Summary - 2002

Sales of targeted export and local market products increased by \$8.47 million – from \$24.48 million in 2001 to \$32.95 million in 2002. Data from Fintrac CDA lead partners (sample size: 98 of 218), showed an increase of 38% in total local sales and 32% in export sales from 2001 to 2002.

The USAID-funded Fintrac CDA (Centro de Desarrollo Agronegocios) program has been working with producers, exporters and processors of non-traditional agricultural products since February 2000. The technical assistance provided uses a production systems approach that covers more than 50 different crops. Fintrac has developed and implemented an Integrated Crop Management program covering a range of standard and Good Agricultural Practices (GAPs) that lead partners have been adopting on their farms with positive results. The implementation of these practices and the overall crop management programs are helping growers increase their sales and yields, lower costs, reduce pest and disease problems, provide optimal nutritional requirements for crops, and maintain a sustainable farm operation through improved soil conservation and water usage, amongst other things. This document outlines some of the activities included in the Integrated Crop Management program which are being used by all Fintrac CDA growers.

Soil Conservation: Growers adopt various basic practices in order to preserve or improve soil conditions in their farms, including initial soil analysis and soil preparation techniques covering subsoil, contour plowing, harrowing, raising beds, managing levels of organic matter, and regulating for optimum pH conditions.

Nursery and Transplanting Practices: After proven results through demonstration lots, lead partners have moved from seed beds and bare root transplants to **nursery-grown seedlings**. Seedling plants grown in a controlled environment provide a higher and more uniform germination, are healthier, and are free from soil diseases and pests. Nurseries are also now using **Trichoderma** (produced by Zamorano), a biological control for soil borne diseases that has shown excellent results for Fintrac CDA clients and non-clients alike.

Transplanting practices have also been significantly improved. Growers are now **measuring the distances between plants and beds** for optimum plant density and yields, and are using **starter solutions** that provide seedlings with better conditions for development. Growers have also begun using **hybrid seeds**, which generally have higher resistance to certain pests and diseases, and are more productive.

Cultural Practices: The Integrated Crop Management system includes certain cultural practices that have been adopted successfully by many growers. Producers are now **sampling and monitoring pest populations** in the field as opposed to routinely spraying chemicals. This has significantly reduced their costs and chemical usage. In addition, Fintrac CDA technical representatives constantly monitor chemicals used and ensure all inputs are EPA approved. Practices such as planting of **trap crops and live barriers (sorghum or corn)**, and introduction of **sticky traps**, have also been implemented by lead partners and their neighboring farms. These help in reducing pest levels in the crop and in preventing virus.



Results

Since these integrated crop management systems are general practices, they have been implemented on almost all client farms and have resulted in excellent productivity results:

- **Cucumber exporters** have increased productivity from an average 1,420 cartons/hectare (2000/01 season) to 1,650 cartons/hectare (2001/02 season) and have maintained these yields during the present season.
- **Jalapeño pepper growers** have increased their yields from 42,000 pounds/hectare (2001) to 66,700 pounds/hectare (2002). Growers that have already finished their 2003 season are averaging over 80,000 pounds/hectare. Over the three cropping periods, net incomes have increased from \$570/hectare, to \$3,400/hectare, to more than \$4,000/hectare.
- **Yuca growers** have increased their productivity from 15,000 pounds/hectare (2001) to 31,000 pounds/hectare (2002). Net incomes have increased from \$360/hectare to \$700/ hectare.

With Project assistance, growers have trained workers in improving their spraying practices through **nighttime spraying sessions with ultraviolet dye**. This helps workers improve spray coverage, resulting in improved pest and disease control and ultimately a reduction in agrochemical use. Growers are also using **crop rotation** to break pest and disease cycles, and are keeping a **log book** to comply with market requirements and to monitor production costs.

Nutritional Program: Fintrac-CDA has developed spreadsheet-generated **fertilization calendars** for different crops according to each crop's specific nutritional needs. Calendars are customized for each grower based on **soil and foliar (petiole) analysis** and the type of fertilization being carried out (manual or through a drip system). These programs have been essential for growers and have contributed significantly to increased yields.

Irrigation: Lead partners have been assisted in optimum water management, and in the design, installation, operation and maintenance of irrigation systems. Most growers have made improvements in their irrigation systems and have moved from rain or gravity-fed irrigation to drip or overhead systems. Growers with drip irrigation have also been introduced to fertigation. These improved irrigation systems have contributed to a more efficient use of water (reduction in use by up to 70%), and has led to the reduction of weed and soil disease problems caused by excessive moisture. Yields have also been increased.

Fintrac CDA activities in Honduras began in February 2000 and the development and implementation of the market-led Integrated Crop Management systems have produced excellent results for growers. In April 2002, the systems were transferred to a similar USAID-funded project being managed by Fintrac in El Salvador. Implementation and technology uptake by Salvadoran growers is showing equally positive results.

