



Entrenamiento y Desarrollo de Agricultores

Assistance transforms a lifetime of struggle into a future of success



Employees mark planting holes and apply starter solutions for transplants.



Plantlets are inspected for health and development.



Workers harvest onions, above, and carrots, below.



Rafael Antonio Andino Rodriguez started farming when he was just 13 years old. In the small community of Frijolares, Guinope, El Paraiso he learned traditional farming practices from his neighbors and family and grew onions and carrots. For 14 years he farmed with poor land preparation, inefficient planting densities, basic irrigation and improper fertilization methods. Rafael constantly struggled and often relied on another farmer in the area to help financially.

In November 2006, he joined MCA-H/EDA and learned to change his production systems with technical assistance from a program technician. The modern systems and technologies helped him reduce risks and increase productivity and profitability. Through MCA-H/EDA Rafael learned basic production practices including contour plowing, preparation of raised beds and use of biological controls and starter solutions during transplant. He also learned to install, use and maintain drip irrigation systems, use specific fertigation programs and plan and implement calendarized production systems for onions and carrots. MCA-H/EDA helped Rafael become a carrot and onion specialist in the region and identified and developed strong, formal market linkages for his products and taught him skills such as recordkeeping to transform his farm into a business.

With his traditional approach, Rafael's onion yields were 3,246 kilograms per hectare. In 2007 his yields increased to 33,838 kilograms per hectare and in 2008 they increased to 78,893 kilograms per hectare. His net income increased with the yields from \$376 per hectare with his traditional systems to \$12,851 per hectare in 2007 and \$16,329 per hectare in 2008.

In 2008 Rafael started to rotate his onion production with expanded carrot production. Using market demand as a guide, he increased carrot production. With his traditional systems, Rafael produced 9,740 kilograms per hectare. After starting with MCA-H/EDA, yields jumped to 51,726 kilograms per hectare. Net income likewise spiked from \$2,857 to \$8,453. Already in 2009, Rafael harvested 0.5 hectares of yellow onions worth \$14,123 in gross sales. With production costs of \$3,193 his profit was \$10,930.

Because of Rafael's reversal of fortune, he is expanding and creating jobs. His labor force increased annually from 120 person-days in 2006 (before MCA-H/EDA support), to 197 person-days in 2007 and to 343 person-days in 2008.

"I'd like to generate more job opportunities," Rafael said. "I'm sure more producers from my community will see this example and do the same."

In order to expand and improve his farm operations, Rafael has invested part of his earnings to buy an irrigation system and accessories valued at \$1,319. He also invested \$1,053 to improve his home at Frijolares.

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– Rafael Antonio Andino Rodríguez - Frijolares, Guinope, El Paraíso**