USDA NRCS
United States Department of Agriculture
Natural Resources Conservation Service

helping people help the land

Know Your Farmer, Know Your Food

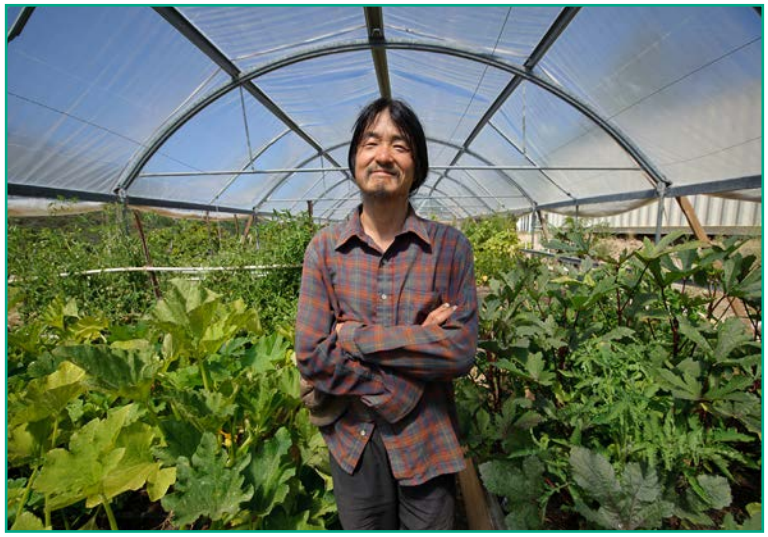
"High tunnels seem to be the most viable and economical solution to extreme weather patterns. Now I am able to grow crops with better quality and extend their growing season as well."

- Dada Gana

Hoop House Benefits:

- Helps farmers grow vegetables both earlier and longer in challenging climates.
- Increases ambient humidity to support heat loving vegetables like eggplant and tomatoes.
- Better air quality due to fewer vehicles being needed to transport crops cross country.

Farming in the high desert can make crop selection and irrigation very challenging. Intense heat quickly evaporates moisture requiring precise water application and other techniques, to keep the ground moist.



Property manager Dada Gana proudly stands in front of his vast array of organic and heirloom vegetables. A high tunnel helps him grow vegetables earlier and longer in the desert.

In addition, high winds, occasional freezing, wildlife and a number of other unique issues make having an effective and comprehensive conservation plan so valuable.

For Dada Gana, the spirtual name of Ken Yu Lee, farm manager at the Ananda Marga Organic Peach Farm, he was looking for effective solutions to a handful of issues on his eight-acre farm in Antelope Valley, two hours northeast of Los Angeles. Paul Nguyen, soil conservationist in the Lancaster Field Office, met Dada Gana at the local farmer's market in 2009. Dada Gana asked Nguyen for help combating high winds in his peach orchard and the office helped design a comprehensive conservation plan. The first element was designing and installing a 380-foot wind break to eliminate constant wind damage. After this first success, the field office helped Dada Gana address Integrated Pest Management issues, and wildlife issues using wildlife-friendly fencing.

Having addressed these initial concerns, what helped Dada Gana truly revolutionize his farming operation was NRCS's assistance installing a hoop house, also known as a seasonal high tunnel, in 2010. This structure has allowed Dada Gana to grow 100 different organic and heirloom vegetables, which have been a hit at the farmers market. Dada Gana's business has never been so successful, and the hoop house also eliminates wind damage, traps

vital moisture and has mitigated pest and other issues. Dada Gana couldn't be happier.

"Farming in the high desert is very challenging. There are just not many varieties of vegetables or fruits that can tolerate the extreme temperature swings, high wind and low humidity," said Dada Gana. "High tunnels seem to be the most viable and economical solution. Now I am able to grow diverse crops with better quality and extend their growing season as well."

Dada Gana has since planted cover crops inside and around his hoop house to improve infiltration and to stop localized erosion. Dada Gana's first hoop house has been so successful that he decided to build a second one on his own.

In addition to Dada Gana, other farmers in California who have installed hoop houses have observed better yields, soil quality and improved irrigation efficiency.

NRCS helps producers plan and install hoop houses - steel-framed, polyethylene-covered structures that extend growing seasons in an environmentally safe manner. Hoop house benefits include better plant and soil quality, fewer nutrients and pesticides in the environment, and better air quality due to fewer vehicles being needed to transport crops. Hoop houses are inexpensive, and easy to construct and maintain.

Financial assistance for hoop houses is being made available through an Environmental Quality Incentives Program special pilot initiative, launched in Fiscal Year 2010. To date, NRCS California has completed 18 hoop house contracts with farmers totaling $26,000. At an average cost of $1,500 per structure, hoop houses are a highly cost-effective way to maximize growing ability and timeframe.

For more information on hoop houses and other conservation assistance, please contact your local NRCS field office or http://www.ca.nrcs.usda.gov.

Above: Dada Gana and Nguyen (right) discuss the tomato varieties that Dada Gana is currently growing in his hoop house.

Right: Dada Gana's hoop house is situated next to a new orchard of peach trees, nestled against the foothills of Antelope Valley.