



# Factsheet

December 2015

## CARIBBEAN HIGH TUNNEL INITIATIVE

The Caribbean Area NRCS is offering financial and technical assistance to producers to install a new practice: a **High Tunnel**.

### What is a High Tunnel?

A **High Tunnel** is a polyethylene-covered metal structure, sometimes called a “Hoop House,” that covers high-value crops to extend the growing season in an environmentally-safe manner. In the Caribbean Area, high tunnels act as rain shelters for production of high-value crops during the rainy season when crop prices are usually higher. Runoff captured from high tunnel covers can also extend the growing season by providing irrigation water during the dry season. High tunnels may look like greenhouses, but they are managed differently. In high tunnels, plants are grown directly in the ground. High tunnels control where to put water and fertilizer so farmers can grow a greater variety of vegetables in a semi-controlled environment. They can also conserve water and save energy costs. Under EQIP, NRCS will only fund a high tunnel on land with a cropping history.



### What is the Difference between a High Tunnel and a Greenhouse?

A greenhouse is a more sophisticated structure. Greenhouse plants are usually grown in pots or other containers set on racks or tables. The plants in a high tunnel grow in the soil (usually amended with compost, cover crops, mulch or other materials) under the high tunnel. Also, high tunnels don't use heaters, lights or mechanical ventilation systems – opening and closing the high tunnel regulates the sun's heat and ventilation.

### Why Should I Use a High Tunnel?

Farmers can use High Tunnels to manage or extend the growing season, providing them with more flexibility to meet local market needs. Increased local food production and consumption helps communities increase sustainability while lowering energy and transportation inputs and costs.

A High Tunnel can also help producers transition to specialty crops or organic. An extended growing season and steady income can offer advantages to small, limited-resource, and organic farmers. High Tunnels can help producers address resource concerns by:

- Improving plant quality.
- Improving soil quality.
- Reducing nutrient and pesticide transport.



- Improving air quality by reducing transportation of inputs.
- Reducing energy use by providing consumers with a local source of fresh produce.
- Adapting to climate change.

### What Should I Think About Before I Build a High Tunnel?

- What size of high tunnel do you want?
- Exactly where on the property you will build the high tunnel?
- Is there enough available sunlight?
- Does the soil have the nutrients plants need to grow?
- Is the land flat or sloping?
- What is in and under the soil?
- Does water soak into the soil quickly after a rain or does it pond?
- How will you water the plants?
- Is there electricity nearby if you need it?
- What crops you want to plant?
- Are your crops self-pollinating or will you need pollinators?
- Do you want to grow food to eat, sell or donate?
- How do your neighbors feel about having a high tunnel nearby?
- Does the city or municipality have building or zoning regulations that might affect putting up a high tunnel?



### Where is the Best Place to Build a High Tunnel?

You want good air flow through the high tunnel. In the Caribbean Area, the wind usually blows from the east, so put the longest side facing north to south. Level ground protected from wind without much shade is best.

### What Other Practices Can I Use with a High Tunnel?

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|---|------------------------------------|
| • Conservation Crop Rotation            | • Irrigation Water Management Plan |
| • Cover Crop                            | • Nutrient Management Plan         |
| • Critical Area Planting                | • Residue and Tillage Management   |
| • Diversion                             | • Roof Runoff Structure            |
| • Grassed Waterway                      | • Row Arrangement                  |
| • Integrated Pest Management (IPM) Plan | • Subsurface Drain                 |
| • Irrigation Reservoir                  | • Surface Drainage, Field Ditch    |
| • Irrigation System, Micro-irrigation   | • Underground Outlet               |

### Where Can I Get Help?

Contact your local NRCS Field Office for technical and financial assistance, or your local University Extension agent for plant recommendations.



*For More Information:*

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