High Tunnel Case Study Hmong American Farmers Association



The Farm

HAFA has 125 total acres in production with many member-farmers on individual plots. Their high tunnels are used to research and demonstrate what grows best and provides good income. They hope more of their member farmers will begin using high tunnels and view high tunnels as great tools to extend the growing season and increase income.

The Tunnels:

- Two 30'x48' high tunnels from Poly-Tex.
- One straight walled gothic, one round sided.
- Drip tape irrigation.
- Roll up side walls and vents to control temperature.
- No heaters, fans or lights.
- Single-wall 6mm plastic.

"Our first tunnel was bought used, with old bent pipes that made it difficult to put up. So we hired someone to build the second tunnel, but since it was brand new maybe we would have been fine doing that one ourselves."

"We chose small tunnels because the ground was uneven and we knew it would be difficult to level off."



Photo credit: Hasting Star Gazette

"The tunnel environment protects our most valuable crops and helps us deal with unpredictable weather."

Crops:

- Tomato very profitable, all types
- Strawberry day neutral
- Peppers all types
- Basil very profitable, two types
- Napa Cabbage spring/fall
- Spinach plant in fall, comes back in spring!



FOOD + COMMUNITY

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Advice from Janssen

"The season extension in our high tunnels is critical to our production of premium crops and indeterminate varieties do very well in them. We leave our plastic up year round."

"We rotate our cash crop, especially since we had powdery mildew in our tomato tunnel last year. Rotation helps control disease. We interseed buckwheat as a summer cover too."

"We do a companion planting of Snapdragon with the strawberries to help with pollination."

"The high, straight sides of the gothic style allow us to plant more tomatoes by planting closer to the wall."

"If we could do it all over again we would minimize field production and focus on high tunnels. We would use tunnels as our #1 production area. High tunnels are the best way to make a good income on the farm."



Created by Colin Jones for the: High Tunnel Immigrant Farmer Training and Demonstration Plot SARE Project: ONC17-029

Management:

- Can plant a month earlier and keep growing a month later each year.
- About 7-8 months production.
- Check temperature 6+ times per day. Tunnels get very hot!
- Tiller/cultivator in spring.
- Manure and fish emulsion for fertility.
- All hand weeding, no mulch.
- Summer and winter cover crop of Oat as needed.
- Companion planting flowers for pollination.
- No sprays/fungicides.
- Rotate crops *each year* to control disease.
- Problems last year with powdery mildew on tomato.
- Keeps plastic up year round.

Cost and Upkeep:

- New tunnel: \$10,000.
- Contractor to build: \$2500
- Need to patch plastic 3-5 times per year. Easy to do.
- \$17,000 income from tomato in first year. \$5,000 profit. Expects \$25,000 next year.