Women of Hope Project

Institute For Simplified Hydroponics Afghanistan (ISHA)
Introduction of new agricultural technology to Afghanistan for the purposes of reducing hunger and improving the economy by creating jobs and export opportunities.

Research and Demonstration Facility

To Train Master Trainers to implement technology throughout Afghanistan

Member of the International Institute of Simplified Hydroponics
ISHA Greenhouse at MAAHF
Institute for Simplified Hydroponics Major Projects and Field Trials over past 19 years:

- 1984 Jerusalen,
- Bogata (UN Funded Co-operative) 1986, 2000
- Columbia (UNDP) 1990
- Venezuela (UNDP) 1990
- Dominican Republic (UNDP) 1990
- Costa Rica (UNDP, INCAP and Spanish Government) 1991
- El Salvador (UNDP) 1992
- Ecuador (UNICEF) 1992
- Chile (UNDP and UNFAO) 1993
- Nicaragua (UNDP) 1993
- Peru (FAO) 1996
- Guatemala (World Food Program –WFP) 1997
- Belize (UNDP) 1997
- Zimbabwe (Japan Council of Governments) 1998
- Seychelles (UNFAO Rome) 1998
- Senegal (UNFAO Rome) 1999
- Brazil (Chicago Methodist Church) 2002
- Tehuacan, Mexico (Institute for Simplified Hydroponics) 2003-2005
- Sri Lanka (FAO, Sri Lanka MOA, and NGOs) 2003
- Afghanistan 2003
What is Simplified Hydroponics?

- Introduction of growing food, flowers and fruits without soil
- 13 Essential Macro and Micronutrients are added to water supply
- Training in organic nutrient production, such as worm farms and poultry droppings are also taught.
- Made from recycled materials
Benefits

- Requires less water than soil farming, as water used is continually recycled and refreshed on a bi-monthly to monthly basis. Provides alternative farming method during drought conditions. Uses 1/10th the water as soil irrigation.
- Ideal in heavily mined areas and where people do not have land.
- Does not contribute to soil erosion and nutrient depletion in soil.
- Portable
- Requires minimum labor and offers maximum output
- Ideal for women, children, refugees and physically challenged.
- Provides nutritious food and a family income.
- Consistent supply – ability to grow year-round.
- Ability to meet demand with crops not indigenous to the Region.
- Improved Health – clean, organically grown fruits and vegetables – Parasite Free
- Ability to meet the demand during drought conditions
- Production can be increased or decreased to meet the immediate demand
- Some crops ready in 30 days and a complete vegetable production in 90 days.
- 6 times the yield in less than 1/3 the space.
Women in Agriculture

**WOMEN:**
- Women should be allowed to enjoy the benefits of a profitable business.
- Many women in Afghanistan are now in the position of being the main source of support for their families.
- Women have the freedom to operate a lucrative agri-business from their homes and still be available for their families.
- Children and other family members can participate.
- Literacy levels are not important.
Garden Spaces

Backyard Small Space Gardening
On a shelf or a wall:
On a rooftop:
In a Community Co-op:
Garden Production

- 10m² Garden produces enough food to feed an Afghan family of 6-8 people daily.
- 40m² Garden provides family income of at least $10 per day.
Greenhouses:
Passive Solar Heating
Growing Containers

Discarded Shipping Pallets
Discarded plastic containers:
Old Tires:
Growing Systems:

Substrate Beds
Types of Substrate:

- Rice hulls
- Sand
- Gravel
- Sawdust
- Coco Coir Fiber
- Almond, pistachio and peanut shells
- Red Volcanic Rock
Nutrient is recycled
Water Floating Beds
Roots in Floating Bed
Hand Aerated
- Nutrients are added to water
- Same water is used for whole growing cycle
- New seedlings are added as mature plant is harvested
Hanging Bags:
Plastic Growing Bags for Tomatoes and Roses
Canoe Beds
Commercial Gardens
Stackable
Recent Projects:

- Riasat-e-panj Refugee Camp
- 54 women and young girls were trained and graduated from a two-month training class.
Taking a pallet apart
Children at Work
Women at work
Teamwork
Seedlings
Refugee Camp Home Gardens
Healthy Food
Healthy Families
THANK YOU

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