

PROJECT HARVEST

SEEDS OF HOPE IN GUATEMALA

**Five
Year
Plan**



Year-Round Family Vegetable Gardens

through Ecological Horticulture



and a Sweat Hose Irrigation System

Most
Guatemalan
subsistence
farmers are
unable to reap
the full
potential of
their land.

Project Goal:

To enable
project
participants to
become self-
sufficient with
enough
knowledge
and capacity to
independently
feed and
maintain the
health and
well being of
their families
by improving
the productive
capacity of
their land
through the
application of
an integrated
horticultural
method.



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The Problem: Unequal Land Tenure, Lack of Resources, Six Months of No Rain, Hunger

Guatemala is one of the poorest countries in the Americas. “Almost 60 per cent of Guatemala’s 11 million people live on less than \$2 a day.”* “...24 per cent of the population suffers from malnutrition and hunger.”**

There are many reasons for this high level of poverty. Guatemala has one of the greatest degrees of inequality in the world. ** A primary factor is that 88% of those who make their livelihoods from agriculture work own only 16% of the arable land.

* Financial Times, June 11, 2002 ** UNDP – Human Development Report 2005



- The majority of rural families (campesinos) currently subsist by working their very small plots of marginal land and harvesting coffee and sugar on the large, export-oriented plantations.

In Guatemala the **dry season** is called the **time of death**. For six months of the year – from November to April – there is no rain, and therefore little cultivation, few crops, almost no work and scarce food.

The majority of subsistence farmers:

- lack the opportunity to have an integrated horticultural system for maintaining year long food and plant production such as seeds and organic inputs;
- lack the technology of an efficient irrigation system for drought or dry season cultivation to make their lands more productive.

As a result, in the absence of a profound land reform, the majority of campesinos remain very poor and live from hand to mouth with little left over for improving the quality of their lives.

A Solution: An Holistic Approach to Family Food Security

Five years of in-the-field experience have demonstrated that integrating four core elements is the key to improving family nutrition, as well as dry season cultivation.

The Four Core Elements are:

1. Participation and Empowerment

The planning and implementation of the project by community members is essential. Emphasis is placed on the involvement of women given their crucial role in producing and preparing food.

2. Biodiversity and Ecological Agricultural Practices

The promotion of crop diversity in family gardens can provide food throughout an extended growing



season as different crops mature. Emphasis is placed on organic techniques such as the use of manure and composting to build healthy soil and avoiding the use of pesticides, chemical fertilisers, etc.

3. Nutritional Education

Nutritional education is focused on women's central role in improving overall family nutrition.

4. Diversifying Livelihoods

The support of different opportunities for campesino families to earn cash income is important because it provides them with options to buy food they don't already grow or invest in future production.

Components of each of the Elements are integrated into the Five Year Plan. Some are:



- Determining the decision-making processes within each of the groups
- Training promoters to give in-the-community assistance
- Setting up revolving community funds to for accessories and seeds
- Teaching soil conservation and composting
- Teaching how to establish a plant nursery
- Teaching pest and disease control techniques
- Constructing water conservation techniques
- Teaching the role of vegetables in good health



- Promoting a preventative family health program
- Teaching the use of medicinal plants and herbs
- Introducing the concept of producing surplus items to sell in market
- Setting up a pilot plan for the production of small animals
- Pilot the production of craft items for fair trade market
- Construct small-scale green houses to augment production and the sale of surplus produce

Integration of a Sweat Hose Irrigation System (SHIS) for Dry Season Cultivation:

The **SHIS** is an appropriate technology that has some exceptional features that can turn the dry season into a time of cultivation.



- The **SHIS** uses a minimal amount of labour and water, even dirty water.
- The **SHIS** allows for food production 12 months of the year, during the dry season as well as the rainy season (if there is a drought).
- The **SHIS** permits a family to produce food in quantities abundant enough for both its own subsistence and as well as surplus food to sell in the market.



Excerpts from five years of project development:

Teaching Multipliers

Project Harvest has collaborated with ten Guatemalan community organizations, and guided the installation of over 200 garden sweat hose irrigation systems in 30 different Mayan communities. Agricultural promoters were taught how to install the systems in their own communities.

Implementation of Ecological Techniques in the Field

Project Harvest, in collaboration with our partner organizations, have introduced new idea about the advantages of raised beds, the incorporation of organic fertilizer to enrich soil, the use of organic mulch, and the collection and saving of seeds to encourage self-sufficiency.

Project Evaluation

After five years the project has produced many tangible rewards which have been reaped by the people most directly affected. Results now indicate that 80% of the participating gardens produce an abundance of tomatoes, carrots, green beans, beets, turnips, chard, and other vegetables that augment and improve the diet of the more than 1000 women, men and children who participate.

The feasibility and effectiveness of the cost efficient irrigation systems have proven to be very successful.



Future Work and Objectives

Participants are enthusiastic about learning new techniques and eager to find longer-term solutions to detrimental practices that have harmed their land over the years.

This development project offers methods and approaches that provide sustainable food security. It provides people the chance to become self-reliant and self-sufficient. It holds the promise of improving the lives of thousands of subsistence-level campesinos. It assists them both nutritionally and financially. It helps Guatemalan families help themselves.

Your Support Is Needed

The Niagara Warehouse of Hope, a registered charity, is the main sponsor of this project. Founded in 1989, this Canadian NGO provides international assistance to groups working in developing countries. Over the years, its development assistance efforts have established schools, medical clinics and irrigation systems.

Project HARVEST can teach a family of seven an integrated horticultural method and for only \$100 provide them with an irrigation system that lasts up to 20 years. The Warehouse invites you to support this project.



*Be a part of
**Project
HARVEST**
and help
plant the
seeds of
hope for
Guatemalan
campesino
families!*