



**Seeds for a Future**  
Creating Better Lives - Today!



# The Seeds for a Future Program in Detail

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## **The Seeds for a Future Program in Detail**

**An Integrated Self-reliance Program in Rural Guatemala  
Addressing Food Security, Nutrition and Health,  
and Increased Income Opportunities.**

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## **The Origin and Development of Seeds for a Future**

Seeds for a Future was founded as a US 501c3 in 2006 by international volunteers who had worked on a Maya archaeological site at Chocolá, Guatemala. Their experiences in the adjacent modern-day village created a desire to help people of the region, with whom they had worked side-by-side, to live healthier and more prosperous lives.

Our initial exploration of best practices -- what to do and what to avoid -- led us to create Semillas Para el Futuro in 2007 as a registered Guatemalan non-profit. Semillas Para el Futuro is the “action arm” for Seeds for a Future and implements our concepts, strategies and methods in Guatemala. For convenience, however, we use the Seeds for a Future name in this report to represent both organizations.

Chocolá is an unincorporated village, designated an Agrarian Community by the government of Guatemala. Seeds for a Future began by working with residents of Chocolá to identify and prioritize the community’s perceived needs and wants, and its human and physical resources.

This effort was led by Suzanne de Berge (planning and business management), Derek Steele (community resource development facilitator), Earl de Berge (political scientist), Alberto Rivera and Anne Kramer (both cultural anthropologists), Enrique Mateu (Minister of Culture for Guatemala) and by the elected leadership of the local governing body, known as the ECA (a farmer’s cooperative association).

A core concept emerged to form a modest-sized program to explore and develop new, effective and practical strategies for addressing the problems of chronic malnutrition of mothers and their children among poor rural families. These were to be strategies that could be taught and applied at the household level and, after field testing, could be replicated in other communities. We did not want to rely on government programs, most of which suffer inefficiency traced to under-funding, poor program design, misguided priorities, and lack of political will.

Based on community meetings held during 2007 and 2008, we determined to work in four primary categories: family health and nutrition, crop reform and diversification, more learning opportunities, and empowerment of women and youth through leadership training.

Over the following years, in response to community input and feedback, and our own evaluation of success and failure, these categories crystalized into an integrated Program with these core action elements:

A successful program can't just show up and say, "Here's the solution to your problems."

To reliably integrate with a community and achieve acceptance and sustainability, our Program includes these initial factors:

- Sensitivity to the cultural context
- Relevance to needs and interests
- Ethnic, political and religious neutrality
- Use of appropriate learning techniques such as learn-by-doing and guided observation
- Design for affordability and the reinforcing effect of early success

Additional factors critical for both the start-up and long-term success of the Program include:

- Field staff are local to the area and trained to model mutual respect
- Encouraging innovation and learning from failure as well as success
- Self-selection by families indicates a willingness to learn and do their part
- Encouraging the sharing of both knowledge and resources

Over the last 13 years, integrating these factors has enabled Seeds for a Future to create a working blueprint for addressing and solving many issues facing rural Guatemalans today.

In the following section, we'll explore some of these critical factors for success.

## **How is Seeds for a Future Different From Other Programs?**

While many programs seek to address immediate needs, which can be critical, Seeds for a Future is about the long-term effects of self-reliance.

The effects of the Seeds Program translate directly into better nutrition, health, and increased incomes. Its cohesion is on both a familial and community level. When other community members see the positive outcomes families are achieving with the Seeds for a Future Program, the Program naturally spreads within the community.

Below, we'll discuss how Seeds for a Future integrates its Program throughout local communities in rural Guatemala.

### **Initial Approach: Listen and Learn**

Chocolá was a difficult place to start. The lingering effects of a genocidal 36-year civil war, and decades of broken promises and failed programs left people with a deep suspicion of the motives of outsiders. We learned the value of patience, thoughtfulness, honesty, and listening. These lessons guided us as we expanded into new communities and areas. Now, as we plan to deploy our Program in a new village, the first step is always a thorough assessment process, preferably in concert with a local organization, to learn about the community.

### **Mutual Respect, Knowledge Sharing, and a Local Orientation**

From the beginning, we have insisted on principles of work that demand mutual respect, cultural awareness, gender equity and democratic processes. The principle of respect also includes understanding and valuing family members' efforts to dedicate time to learning, participating, and recognizing that family members also have knowledge to share. Cultural awareness and community receptiveness were fostered by ensuring that our Project Manager (a Guatemalan agronomist) hired and trained only local residents for our Team. Another important principle was that there would be no “ancillary agendas” – specifically, neither religion nor politics were to be part of our work.

### **Integrated Program**

During our earliest listen/learn period, it became apparent that an Integrated approach was required. Just as food security, nutrition, family income, and health do not occur independently, our Program approaches these factors as parts of a whole. Because of cultural patterns defining family members' roles, addressing these factors means involving most family members in working together to build a better life. Nutrition and Food Security, for example, are most closely aligned with the role of women, so women

are the primary focus of our actions in this area. However, the bulk of a family's income is likely generated by the men, often on a family farm. As a result, our efforts to improve family income include programs for the men to diversify crops, implement agroforestry, and improved, appropriate-technology farming techniques.

### **Accompaniment and Coaching; Fostering Inventiveness**

A key to our program's success is our "accompaniment strategy," which recognizes the critical need for families to receive information and answers to problems they may encounter over time.

Early in our experience, we learned that family members needed to learn methods and develop self-confidence in undertaking new activities where they must make decisions themselves. After centuries of a patron system that discouraged decision-making, trial and error can be viewed as not a failure, but a way to learn.

### **Grass Roots, Flexibility, Adaptability**

Being a "grassroots" program, in contrast to the top-down design of most government and large NGO programs, is vital to our success. Especially as we move into new areas, our Program must be flexible and adaptable to the needs of the families, the community, the culture and the environment.

This flexibility has been central to program acceptance in other communities. Efforts to create long-term and sustainable reductions in food insecurity and malnutrition require the self-help and self-determinism of those who suffer from these evils. Such programs cannot succeed if they cannot consider all the variables encountered and do not permit flexibility and adaptability to adjust as needed for success.

Programs that will have a lasting effect are, after all, attempting to modify human behavior and long-established cultural practices. Bureaucratic and one-size-fits-all programs do not succeed.

## **Working Toward Sustainability**

Guatemala and Central America are littered with well-intentioned but abandoned NGO projects that came to help people live better lives. Many failed because they depended entirely or largely on outsiders to run the programs and never achieved “buy-in.”

From inception, we have focused our hiring and training entirely on local people to implement programs they and participants have helped design and who have helped solve problems as they emerged. A constant theme in planning and developing our strategies has been that participating families should be encouraged to take the initiative at every opportunity. Opportunities for individuals or groups to create additional income sources through micro-businesses to sell their products are supported with information and coaching.

## **Strengthening Communities**

While not listed as a “main focus” of our work, we believe that strengthened communities will be a natural result of our integrated Program.

Communities are built as people acquire the technical skills needed for success, identify opportunities for their own future, and learn to work together. Individuals and families experience the realization that supporting each other to build a better life means a better life for all. The key to this process is education, not necessarily in a formal sense, but learning skills that will last a lifetime; practical, learning-by-doing education that helps people gain the confidence and skills needed to lead others to start their own self-help activities and to work toward common goals.

Another significant result we hope for and expect, but which may not be seen for many years, is that young people who now see little or no future for themselves in their hometown may see things differently.

Establishing a family, ensuring their children sufficient food and nutrition, and seeing a path to a stable economic future on their own farming parcel may help reduce immigration challenges in the US. It will also help reduce the number of young people at risk of human trafficking and increase the number who can envision a prosperous future among their family and friends in a town they love.



## Effectiveness, Results, and Successes

Malnutrition and Food Insecurity have plagued Central America for generations and contributed to a vicious cycle of poverty, out of which it is very difficult to emerge. The UN's World Food Program notes that in Guatemala, "the prevalence of stunting (height to age) in children under 5, is one of the highest in the world – and is the highest in Latin America and the Caribbean.

Every child who suffers from insufficient nutrients is stunted, both in size and brain development. The consequences last a lifetime and are carried forward genetically and behaviorally to subsequent generations. When allowed to exist in great numbers, this individual tragedy creates hardship and dysfunction on a national scale.

Many programs address malnutrition with hand-out strategies, which are essential for relief in a short-term crisis but do not teach people in need how to address food security and nutritional needs themselves. Seeds for a Future uses practical strategies that are low-cost and replicable from family to family, and which can break apart the atmosphere of dependency.

To date, more than 2000 families have benefitted from the Seeds Program. This means that our concepts and methods have helped improve the nutrition and food security of approximately 15,400 individuals (based on an average family size of 7.7).

While family garden projects may claim positive results anecdotally, our integrated Program is one of very few with scientific documentation of positive effects on health and physiology. The highly respected **Institute for Nutrition of Central America and Panama** (INCAP) conducted an independent three-year scientific study of our methods and strategies (2014-17). Funded by the Nestlé Foundation of Switzerland, INCAP provided technical support for the nutrition training. INCAP staff conducted all health assessments, including regular measurements of body growth and blood hemoglobin levels. The Seeds for a Future team planned and conducted all field activities.

The INCAP study clearly substantiates improved nutritional status for newborn and toddler children during the critical 1000 Days Window resulting from their mothers participating in "a well-designed and well-implemented 'nutrition garden' program." Excerpts from the report:

*"At follow-up and final (health) assessments, it was observed that as a result of the support provided at the household level in terms of home gardens and education activities,*

*there was a significant consumption of the food promoted by the study. These foods were promoted because they were rich sources of nutrients, especially protein and minerals, such as iron. A reported average consumption between 8-9 times a week in mothers and children in both clusters is very significant and may explain in part the improvements in hemoglobin and iron status in mothers and children at the end of the study in both clusters.*

*“...the results can be compared with national rates from a recent nutrition survey. At baseline, the rates of anemia in study children were lower than national rates of children of 6-12 months of age, at about 70% (ENSMI 2014-15); however, at the end, the study children showed much lower rates (<5% in both clusters) than the rates of anemia reported for children between 24 -36 months of age, at 27%, compared to an overall rate of anemia in children <5 years at the national level of 32.4%, and for Suchitepéquez, 37.7%.*

*“The baseline rates of anemia in study women were 17.3% and 14.3% for SPJ and STU, respectively; which were comparable with national rates at 13.6% and for Suchitepequez, at 17% (ENSMI, 2014-15). However, at the end of the study, the rates of anemia in participating women decreased to 7.5% and 0%, for SPJ and STU, respectively.*

*“In conclusion, this study provides evidence that an integrated approach involving health, nutrition and agriculture with a duration of at least 24 months of follow up may have a significant positive impact in nutrition outcomes, especially in hemoglobin and iron status biomarkers, of mothers and children under five years of age in rural populations.”*

Equally important evidence of the success of the Seeds for a Future program may be seen in the results of a survey conducted in January 2018 among participants in the INCAP/Nestlé study, one year after the fieldwork ended and our coaching activities with those families were concluded.

Important findings include:

- 80% of participant families still continued at least one activity they learned during the study
- Economic benefits resulting from the home nutrition gardens are continuing,
- The rate of illnesses for mothers and children has dropped significantly, and
- Even families who did not still have a garden report very high usage of the selected nutritious plants in their daily diets.

**Seeds for a Future’s strategies and methods positively affected participating mothers and babies** in the measures used to assess nutrition status. In addition, women report saving both money and time due to having ready home access to foods they would otherwise have to travel to the market and buy (if they are available).

If appropriate attention is paid to cultural, environmental and social factors, the fundamental concepts underlying our strategies can be successfully applied in rural areas of other developing countries.

In addition to the training and resources for creating gardens and raising animals, families also receive training and information on:

- The nutrient value of foods,
- How those values affect their family members,
- How to use the foods they raise in popular local recipes,
- How to avoid pathogen and disease transmission via hygienic practices in the kitchen and during food handling
- Basic first-aid practices

At the same time, and reflecting the integrated nature of the Seeds Program, participating smallholder farm families have improved their agricultural practices and, thus, their yield and income through crop diversification. They’ve planted over 10,000 native cacao trees and more than 8,000 other productive native tree species, including those that produce fruit, nuts or firewood (which also reduces the amount of native forest being cut for wood-burning stoves).

Another impressive result of Seeds for a Future’s work is the production of detailed, illustrated manuals on Nutritious Greens, Raising Rabbits for Food, and, more recently, on best methods for Family Nutrition Gardens and Backyard Farms. Other publications include twenty-nine resource and “how-to” pamphlets and folders for use by the Team or by families, as well as two general recipe books featuring the use of nutritious foods from the family gardens in popular recipes of the area, and a third recipe book for healthy and nutritious cold and warm beverages. The Seeds Team and the women participants jointly compiled the recipe books.

In addition, the Team produced two comprehensive, fully illustrated books on our methods and strategies. Highlighting our Integrated approach, these are suitable as resources for other organizations that would like to implement such a program in their

own area. For example, the 600+ page *Libro de Desarrollo* (Development Book) records the approach and activities of the Seeds team in implementing our integrated development program.

A list of our books and manuals is available in the Links section at the end of this document.

## **Methodology of Our Core Action Areas:**

The Seeds Program incorporates long-term training and support with three core action areas:

1. Nutrition and Health Education
2. Permaculture Gardens and Small Animal Husbandry
3. Increased Incomes Through Micro-business Creation

In addition to the training and support, Seeds for a Future supplies the initial seedlings for the permaculture gardens, protein animals, and pen enclosure materials as needed.

**Below, we'll discuss the constituents of each element and how they benefit program participants and communities.**

### **1. Nutrition and Health Education**

In rural Guatemala, persistent nutrition and health challenges are exacerbated by limited access to diverse and nutritious food sources, leading to high rates of malnutrition.

The fragile food security further compounds the nutrition issue, as communities struggle to consistently access an adequate and balanced diet, posing significant barriers to overall well-being.

To achieve lasting change and overcome these challenges, the Nutrition and Health core is comprised of these elements:

- **The “What and Why” of nutrition**
- **The First 1,000 Days Program for mothers and infants**
- **Kitchen hygiene, family health, and clean water**

## **The “What and Why” of Nutrition**

To address the “What and Why of Nutrition”, the Seeds Team teaches participants one-on-one and in small groups.

Nutrition in the Program is strongly emphasized:

- What it is
- What it does
- What plants supply which type of nutrition
- How to use nutritious foods in daily meals
- How better nutrition will help their children and other family members

To help ensure families benefit from the nutritious foods they produce in their gardens, our Team has worked with women participants to create recipe books that feature homegrown food items.

Our cooking demonstrations and recipe books include favorite local recipes, easily enhanced with the family’s plant and animal production for tasty, nutrition-packed meals.

An important result of this collaboration is that most recipes are for dishes already popular among families in the area but are now enhanced with more nutrition. Other recipes may be unfamiliar, so this is where group cooking demonstrations come into play.

Part of the nutrition effort encourages mothers to guide their children away from commercial products that contain little nutrition and may even contain harmful ingredients. One of our most popular recipe books is for homemade nutritious hot or cold beverages, which encourages, for example, simple fruit or vegetable-based “refrescos” instead of commercial sodas.

## **The First 1,000 Days Program for Mothers and Infants**

A strong focus of the Program is proper nutrition for pregnant and nursing mothers and their infants. During the critical First 1000 Days – from conception to age 2 -- good

nutrition is vital for escaping the lifelong impacts of chronic malnutrition, such as physical and mental development.

When navigating this vital timeframe, many women rely on familial and cultural feeding practices handed down through the generations. Some of these are worthy of continuation, but others are very likely developed to meet the realities of poverty and food insufficiency.

Multi-generational households are very common and it is typical for young mothers to receive instruction from their own mothers or more likely, mothers-in-law. Our team members have been trained to respect the people who have guided a mother, while presenting nutritional information that should not be ignored.

### **Kitchen Hygiene, Family Health, and Clean Water**

In addition to the nutrition aspects of the Program, kitchen hygiene and family health are critical.

A home may have piped-in water, but it probably must be boiled for drinking or cooking.

The nearest health clinic may be quite distant in practical terms, and its services may be limited. Home sanitary facilities are often very simple and often located too close to food handling areas.

We teach practical hygiene techniques families can use to reduce the possibility of disease transmission during food handling and throughout the home. Simple first-aid training helps people deal with emergencies and better understand when to go to a clinic or doctor for help.

Hygiene in food preparation and the kitchen, and basic family first-aid are also covered, as well as managing household waste via composting, recycling, repurposing or appropriate disposal.

A major health factor in rural Guatemala is the effect on lungs and eyes of smoke from cooking fires, particularly if the fires are indoors. Many rural kitchens feature a raised open fire; others may have a small open-top stove made of concrete block, some simply a fire pit. Unvented, all these release smoke and toxins into the home.

In addition, they are environmentally unsound and expensive to cook with, as they require a lot of wood, which they burn inefficiently. Our Team encourages families to build simple vented stoves that also use less wood. We may help facilitate this with a savings plan or a small loan.

Families whose cooking areas are outdoors may not have the same risk level for lung or eye problems from smoke, but in addition to the inefficiency of burning wood, both types of households share the problem of keeping their kitchen area clean enough to prevent food-borne illness, especially when cold storage options are limited. Our training sessions cover best practices appropriate to a family's resources, keeping hands and surfaces clean and disinfected as needed.

A water filter can make a big difference in family health. Just as for buying stove materials, we may facilitate the purchase of a water filter at a discounted price and with a savings plan or small loan.

## **2. Permaculture Gardens and Small Animal Husbandry**

The Permaculture action area of the Seeds Program teaches rural Guatemalans how to produce thriving gardens using permaculture systems and regenerative farming methods.

Seeds for a Future's permaculture principles and regenerative agricultural practices include:

- Nutrition gardens contain a diversity of plants that flourish locally and are culturally accepted.
- The family's available space is carefully planned and designed to ensure efficient yields and sustainability.
- Organic practices are emphasized.
- Families grow their own seedlings and manage poultry and animals to ensure their own renewable supply.
- Recycling, reusing, and repurposing materials and composting are prioritized.
- Environmental stewardship is valued and reinforced

## **Backyard Farms**

The “Backyard Farms” component of the Seeds for a Future Program teaches participants how to transform yards and patios into thriving gardens and animal enclosures using permaculture practices.

**The Backyard Farm component consists of:**

- **Training for the creation and sustainability of nutrition gardens.**
- **Training for the raising of small animals for protein**
- **Re-organizing / repurposing indoor and outdoor spaces**

In our approach, one size does not fit all. Each family’s resources are different, and nature is full of surprises. The program must be flexible enough to provide practical assistance and offer a path to success that fits the circumstances of each family. The Backyard Farm Program is designed so families receive regular in-home and classroom coaching and mentoring for at least 12 months. The general structural outlines of the Program are as follows:

- A. Participating families “self-select” for participation in the Program by indicating their interest. After receiving a thorough briefing on their responsibilities and ours, if the family commits to participate, senior members of our Team will visit the home. Together, the Team and the family assess available space and other relevant factors. A plan of action is jointly agreed upon for how their home space can be used to best advantage for a permaculture-based Nutrition Garden, to raise poultry or other protein sources, and grow fruit trees if possible, etc., and work begins.
- B. Seeds for a Future provides initial seeds, seedlings, and starter animals if needed, but our primary “gift” to the families is coaching and mentoring them to implement the action plan for converting their previously unused space into a productive backyard farm.
- C. If needed, we may also provide initial wire fencing for housing poultry and animals and protecting the Nutrition Garden.
  1. Nutrition Garden plants are selected for nutritional value, cultural acceptance, and success in the target environment. In the Chocolá area,



for example, these are primarily: bledo, flor amarilla, chipilín, quilete, quixtán, chaya, moringa, celery, onion, tomatoes, cucumber, cilantro, beets. Jalapeño, bell pepper, chard, and radishes. Nutrition-rich micro-greens and Oyster mushrooms are especially important during rainy season months, when Nutrition Gardens may suffer from heavy rains.

2. Typical animal protein sources include chickens, ducks, doves, chompipollos and other local bird types, rabbits, tilapia and snails. Some families have sufficient space and resources to raise a pig.
3. As each family begins implementation of their plan, Seeds Team members begin weekly visits to their assigned families for the purpose of:
  - Answering questions and providing guidance in soil preparation, planting, plant care, animal and poultry housing and care, treating any pests or diseases, and problem resolution, etc.
  - Assessing progress and recording advances or problems in the file maintained for each family.

For a family to develop a complete and productive Backyard Farm and become confident in their ability to continue and expand their success takes about 12 months, in part because they need to experience the impact of various seasons. At this time, Field Team visits continue, but the amount of time spent with experienced families is reduced so that Team members can spend the needed time with new families.

### **Re-organizing / Repurposing Indoor and Outdoor Spaces for Productivity and Well-being.**

Many families have neglected space around their homes. Little by little, these neglected spaces can fill with discarded household items. We help families take a fresh look at these spaces and see them as resources for gardens, plant containers, chicken coops, rabbit pens, and maybe even a tilapia pond.

Indoors, simple re-organizing makes a big difference in how the family gets along and feels comfortable in its space. We teach recycling, repurposing, and composting. This reduces the amount of waste generated – a big benefit to the environment, especially in areas without authorized trash disposal services.

As mentioned above, one of our first steps with a family is to meet at their home and jointly assess the opportunities and challenges presented in the area around their home. Discarded containers or even old tires can be used to grow various food plants. “Jumbo” beverage bottles can be hung on a wall, each growing a nutritious plant. A shady corner unsuitable for plants may be a good space for a rabbit hutch or chicken pen. Bamboo growing wild can be used instead of expensive lumber for building animal cages. Besides using discards, the process helps family members see their home space with fresh eyes.

A similar process occurs later inside the home, helping people see new ways to organize their interior spaces for more comfortable and healthier living.

As part of this action focus, we work with family members to learn the value of separating their trash as recyclable or compostable and help them find ways to properly dispose of the remainder.

Some household leftovers can become animal food, and other food waste can be composted and, along with animal wastes, used to fertilize planting spaces. As these specific actions are learned, families come to instinctively understand how their activities are interconnected, and they begin to build better, more satisfying lives.

### **3. Increased Incomes Through Micro-business Creation**

Low rural incomes typically limit access to education, even for young children, but especially after 6th grade. Books and supplies are often not provided, and entire population segments are left with limited training and opportunities for meeting their basic needs.

The limited education and rural employment opportunities directly impact food security and incomes throughout rural communities.

For creating new income opportunities, the Seeds Program focuses on two aspects:

- **Selling excess crops and animals**
- **Diversifying existing crops**

## **Selling Excess Crops and Animals**

Participants often produce more than they need and can share or sell the extra.

Garden vegetables, greens, mushrooms and eggs are sold in local markets, and often, fruits, especially those that produce a large crop in a short timeframe.

In addition to the garden surpluses, participants often raise chickens, other types of poultry, and rabbits to sell to neighbors or in the market.

## **Diversifying Existing Crops**

Sometimes, the greatest improvement in family cash flow results from changes in agricultural activities, which are primarily the province of the household's men.

In many areas of Guatemala, the traditional and most "beloved" crop is coffee. For example, this is true in our home area of Chocolá, but the altitude is too low to grow the type of coffee demanded by the modern market. Classified as "soft," local coffee fetches a very low price. Moreover, coffee gives a harvest just once a year. Thus, while local farmers are very attached to the crop their fathers and grandfathers grew, they struggle with inadequate cash flow to sustain their families. Seeds provides farmers with ideas, demonstration farms and coaching in the following areas:

- **Crop Diversification:** We urge farmers to consider cacao (the source of chocolate) as an alternative crop. It is native to the area, requires approximately the same amount of land and effort as coffee, but gives a crop twice a year and has 2 or 3 times the sale value, even before any added-value processing. Under our guidance, more than 8,000 cacao trees, many of these sprouted via our classes in germination techniques, have been planted by area farmers and are now mature enough to produce.
- **Intercropping** is also encouraged, with a diverse array of other species. These include native fruits (e.g., avocado, banana, Maya nut, jocote marañon, guanábana, guayaba, papaya, petataxte), and high-value native and non-native species such as citrus, teak, cedar, mahogany and palo blanco, which not only provide the necessary shade environment for coffee or cacao, but produce food or

can be harvested for high-value lumber or for firewood. Local farmers have planted more than 5,000 “firewood” tree seedlings donated by Seeds. These trees help reduce the cutting of native trees important to the local ecology. We have also collected or grown 3,000 young nut, local fruit, and lumber trees for distribution at no or low cost to farmers.

We offer farmers both classroom and field learning sessions in:

- managing their soil,
- understanding nutrient requirements of various crops,
- how to create and use organic and environmentally friendly fertilizers and pest control
- learning to understand the makeup of commercial fertilizers and when/how to apply them,
- the importance of good pruning practices for best results
- best practices for harvesting and storage, especially for crops less familiar to the farmers than coffee.

Micro-business coaching and assistance is offered to families who wish to take advantage of their excess Backyard Farm production, and to farmers, to help them achieve the best income results from their cash crops. Coaching includes:

- Local market assessment to help them select crops that will sell well in the community.
- Ideas for adding post-harvest value to their crops to enhance financial return.
- Fostering cooperative organizations for more effective purchasing of supplies and better marketing their products.

## **Engagement and Self-reliance for a Healthier and More Prosperous Future**

The underlying goal of Seeds for a Future’s Program is for families to build for themselves better lives they can sustain into the future.

Trimmed of all the strategies and details, our most fundamental action is to foster **positive behavioral change**. This requires that participants are not simply exposed to new skills or information and then left on their own. Coaching and mentoring must occur to help ensure learning.

Most adult men in the region attended school only through the sixth grade, and for women, even less. That education was very likely of diminished effect due to its poor quality, and because it often seemed irrelevant to daily life. Nevertheless, many adults, especially women, reveal a powerful interest in learning, especially knowledge useful to their daily lives and tasks.

Often, for those who have found limited value in classroom learning, other learning modes, such as guided observation and practical, “learn by doing” experience, are very successful ways to learn skills and gain confidence.

Our Team closely supports participants to help them become comfortable and confident in their new skills and embed the skills into their daily thinking and routine. A team member visits each family weekly to provide on-site coaching and mentoring.

Home visits are supplemented with small group meetings in the home of a participating family or at one of our demonstration centers. Field Days at the centers and visits to other participants’ homes allow families a chance to see other Backyard Farm options they may wish to adopt.

During both home visits and small group sessions, participants are stimulated to identify problems, design and implement solutions, and in team efforts, to assume leadership roles. Experimentation and learning from mistakes are encouraged.

As they engage with the processes of the Seeds integrated Program, participants become more self-reliant, with a new sense of their ability to impact their future.

Our group and neighborhood activities are designed to assist in fostering attitudes of cooperation and working toward the common goal of better nutrition for themselves and their neighbors. During the later weeks of a family’s participation, our extensionists encourage them to share their knowledge, skills and experience with family members and neighbors. By this time, the family is confident with their crops, animals, and life skills. As they share their knowledge with extended family and neighbors, they create a chain reaction that spreads throughout the entire community. Natural or budding leaders are nominated by the Team to be “promotoras” or “promotores” and given extra training to help them move into local leadership roles.

We discussed at the beginning of this document the following factors for engaging with the local families and communities, but they’re worth repeating:

### **The Program includes many factors for achieving acceptance and sustainability:**

- Sensitivity to the cultural context
- Relevance to needs and interests
- Ethnic, political and religious neutrality
- Use of appropriate learning techniques such as learn-by-doing and guided observation
- Design for affordability and early success

### **Experience has shown these factors are also critical for the Program's success:**

- Field staff are local to the area and trained to model mutual respect
- Encouraging innovation and learning from failure as well as success
- Self-selection by families indicates a willingness to learn and do their part
- Encouraging sharing of both knowledge and resources

## **The Future**

Seeds for a Future has established, through structured research and by direct observation, that our approach and methods produce positive results for participating families.

These positive results are seen in health and nutrition measures, increases in income, and a vital sense of accomplishment. This sense of accomplishment enables Program participants to see themselves as agents of positive change for their family's future.

Building on this success, we will continue to expand the Program's impact via outreach, training and support materials to help more families better feed themselves, enjoy greater food security and raise healthy children.

### **Re-creating our Most Important Asset -- New Extensionists Teams for New Locations**

A key component of the success of our Integrated Backyard Farm Program is the Team of well-trained and dedicated local extensionists. Team members work directly with

families to train and mentor them in growing plant and animal foods, while improving health and nutrition, and diversifying and increasing household incomes.

For the immediate expansion of the Backyard Farm Program to more villages, Seeds for a Future created a **7-month Extension Program** that develops new local extensionist teams.

A local partner organization is responsible for supporting the new extensionists as they continue the Backyard Farm Program in each new village after our training is completed. Application of the Extension Program in diverse areas has shown our Backyard Farm concepts and methods can be successfully adapted to a wide range of climate conditions and cultural contexts.

### **Looking Beyond to Regional and National Actions**

The Extension Program can continue to expand the number of families and villages, but we want and need to do more to share the results and impact of the Backyard Farm Program.

Seeds for a Future has created concepts and training methods that work well culturally and practically. We seek to establish the Integrated Backyard Farm Program as a model program – a way of life for future generations -- throughout rural Guatemala and beyond.

The success and sustainability of our Program will result in thousands of rural families building better, healthier and more productive lives.

We believe our Program is at a tipping point for sustainable success and acceptance throughout Guatemala within the next two to three years, as a model program for rural community development, and thus will concentrate our attention on two main goals.

Both regional and national actions are envisioned: a **Regional Agricultural Learning Center** and **National Backyard Farm Extension/Outreach Service**.

Working together, these can make the Seeds for a Future integrated Backyard Farm Program a standard method for rural citizens to build self-determined health and prosperity and create lasting community development.

## **Regional Agricultural Learning Center**

Since Seeds for a Future was founded, we have dreamed of establishing a permanent agriculture-based learning center. Such a Center would offer rural people an opportunity to see that education can be relevant to their daily lives and that agriculture can offer a path to a successful life within their home communities and culture.

Education of this type will also help young men and women stay in their home towns rather than fleeing to cities or migrating to other countries in search of opportunity.

### **Several recent actions support this vision:**

Since early in our Program, Seeds for a Future has enjoyed a mutually beneficial relationship with several universities in Guatemala in which their practicum students are assigned to work within our Program.

Our Team benefits from the students' investment of time and energy and their insights and education in specific areas that support our work. The students gain hands-on career experience as they work deeply embedded in our communities and in participants' homes. The response of students and professors alike makes it clear that practical learning is an essential partner for classroom-based education. (Comments and evaluations from supervising faculty may be seen on the Seeds for a Future's [Testimonial page](#).)

We have also worked with student groups from US universities, primarily in sensitizing them to real-world issues and conditions they may need to be aware of when developing plans and programs for their course work and later real-world implementation.

Before the Pandemic, Seeds for a Future offered seminars at our Learning Center in Chocolá, on the concepts and methods employed in the Integrated Backyard Farm Program. These seminars gave us considerable insight to incorporate into planning for a Regional Center. Although a great many were interested, only a portion were able to attend. Financial support of various kinds is needed, including possibly replacing the attendee's contribution to family income while they're away at a seminar.

Our experience with both the University students and the pre-pandemic seminars confirmed that Chocolá would be an excellent site for a Regional Agricultural Learning Center, especially because students would be privileged to shadow local extensionists and



speak directly to participants during visits to their homes and gardens. The Center would need to offer scholarships for limited-resource students and would teach basic education skills as needed, while focusing on these key concepts:

- The integrated Backyard Farm program
- More productive farming techniques for smallholder farmers
- Sustainable agriculture and agroforestry
- Environmental protection

### **National Backyard Farm Extension/Outreach Service**

This service would be based on the Extension Program we have already field-tested and proven. Prioritizing training new extensionists from throughout Guatemala at the Regional Agricultural Learning Center would greatly accelerate the development of the National Extension/Outreach Service.

The results of this service would be further enhanced by the participants themselves. A core concept in all our work is coaching and accompaniment of participants – helping embed new skills, and helping people achieve the confidence they need to make their own decisions with the knowledge they have gained.

We emphasize this because participants must come to rely on themselves and become agents of positive change for themselves and their communities. Moreover, field experience shows that they are eager to do so. The empowerment they feel leads families to continue their new practices and share these with family members and neighbors.

To achieve these regional and national objectives, a major partner is required. If you have resources along these lines, [please contact us](#).

### **In Closing**

A few words about our Team: We feel great satisfaction with the success of the Seeds Program that has been formed over more than a dozen years of experimentation and fine-tuning. We are very fortunate in our Project Manager, Ing. Armando Astorga, and we are enormously proud of him and the Field Team he has built.

His dedication, strength of heart and unlimited willingness to teach have produced a team with equal heart, devotion to their community, and a wonderful ability to absorb, process, and build on the training Armando has provided.

It has been a joy to watch each member develop and grow in skill and confidence under Armando's mentoring; to see once shy and practically wordless young people now confidently presenting their knowledge and skills to groups of avid listeners.

In addition to the core group that has been a part of the entire process, we have had the opportunity to share our ideas, information, concepts, and principles with many other men and women from the villages. We are very proud to have helped create an amazing community resource of leadership, commitment and knowledge.

And a few words about the participants, especially the women, who are often the most marginalized in the rural communities, and have the least education. It was revealing, almost painful, after a meeting providing basic nutrition information, to hear women say, **"Thank you so much -- for taking us into account, for helping us learn; no one has ever told us these things."**

## **Partnerships and Support**

- **Foundations**

- The Larrea Family Foundation
- Nestlé Foundation of Switzerland
- RIESTER Conservation Foundation
- Daniele Agostino Derossi Foundation
- Pegasus Liberty Foundation
- Arkay Foundation

- **Governments, Municipalities and Communities:**

- The Ministry of Culture, Institute of Archaeology & History, Guatemala
- Agrarian Community of Chocolá (where the Program was initiated)
- USDA Farmer to Farmer Program, Auburn University faculty Robert and Sydne Spencer
- San Pablo Jocopilas, Suchitepequez; Office of the Mayor, Office for Women

- **Universities and Institutions:**

- Institute for Nutrition of Central America and Panama (INCAP)
- Arizona State University, Sustainability School
- Centro Universitario del Sur Occidente (USAC CONSUROC)
- Universidad del Valle, Guatemala
- Escuela Nacional Central de Agricultura (ENCA)
- Universidad Panamericana
- UC Davis, Environmental Engineering

- **Other NGOs:**

- Maya Health Alliance/Wuqu' Kawoq (provides health care to women and children);
- Semillas Nueva (introducing new high-protein corn and bean seeds to rural farmers)
- Amigos de Chocolá (provides scholarships for exceptional students)
- "Let's Be Ready" (focuses on preschool learning for rural kids)

**Links:**

[Seeds for a Future Website](#)

[Seeds for a Future Videos](#)

[Testimonials from Program Participants and University Faculty](#)

[The INCAP Research Study of the Seeds for a Future Program](#)

[Seeds for a Future Books and Guides List](#)

[Seeds for a Future and The First 1,000 Days Program](#)