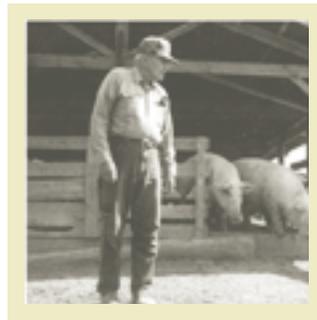


# SALZBURG SEMINAR

398



Seeds of Hope:

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## Feeding the World

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## Through Community-Based Food Systems

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W.K. KELLOGG FOUNDATION

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## W.K. Kellogg Foundation

Since its inception in 1930, the W.K. Kellogg Foundation has focused on building the capacity of people, communities and institutions to solve their own problems. Kellogg Foundation programming is guided by the organization's mission: "To help people help themselves through the practical application of knowledge and resources to improve their quality of life and that of future generations."

Programming activities center on a common vision of a world in which each person has a sense of worth; accepts responsibility for self, family, community, and societal well-being; and has the capacity to be productive.

Established programming areas include Health; Food Systems and Rural Development; Youth and Education; and Philanthropy and Volunteerism. Within these areas, attention is given to the cross-cutting themes of leadership; information systems/technology; capitalizing on diversity; and social and economic community development. More information about the Foundation may be found on its Web site at [www.wkkf.org](http://www.wkkf.org).

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The Salzburg Seminar is one of the world's foremost international education centers committed to broadening the perspectives of tomorrow's leaders. With the principles of reconciliation and intellectual inquiry central to its activities, the Seminar is dedicated to promoting the free exchange of ideas, experience and understanding in a multidisciplinary, cross-cultured environment. During the course of each year, some 1,000 professionals of exceptional promise from more than 100 countries gather at the Seminar's facility at Schloss Leopoldsdron, in Salzburg, Austria, for discussion of political, social and cultural issues of universal concern. It is the Seminar's belief, confirmed by a tradition of 52 years, that intensive interaction among peers from diverse backgrounds in a neutral forum will expand viewpoints, facilitate the establishment of worldwide professional networks, and enlightened change in the future. More information about Salzburg Seminar is available on its Web site at [www.salzburgseminar.org](http://www.salzburgseminar.org).

## Acknowledgment

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More than 780 million people around the world are chronically undernourished, including 200 million children under the age of 5. And despite technological advances in seed, production, food transportation and processing technologies, the hunger problem continues to worsen in some of the world's most populous regions.

The number of food-insecure people has more than doubled in Sub-Saharan Africa, and has also increased in South Asia since 1970, says Rajul Pandya-Lorch, director of the International Food Policy Research Institute's (IFPRI) 2020 Vision for Food, Agriculture and the Environment initiative.

Of the total number of food-insecure people in the world, the United Nations Food and Agriculture Organization (FAO) estimates that 303 million live in South Asia, 197 million in East and Southeast Asia, 194 million in Sub-Saharan Africa, 54 million in Latin America and 30 million in the Middle East and North Africa.

Food insecurity also exists in developed countries, such as the United States. The United States Department of Agriculture's September 2000 food security survey found that 5.6 million adults and 3 million children lived in households where someone experienced hunger during the year.

Food insecurity, however, takes on a different form in the United States, notes Andy Fischer, executive director of the Community Food Security Coalition, Venice, California. "It's not so much about starvation, as it may be in Africa or parts of Asia or Latin America. For many food-insecure in the United States, they're actually obese because they're not eating nutritionally adequate diets."

The causes for this type of malnutrition range from lack of nutrition education to poor access to healthy food. "In many inner cities in the United States," notes Fischer, "supermarkets have moved to the suburbs, leaving the people without places where they can get a full range of affordable and nutritious foods." They're left instead, he adds, with "corner stores."



## Defining Food Security

So what does the term “food security” mean? The United Nations defines it as “when all people, at all times, have physical and economic access to sufficient, safe and nutritious food for a healthy and active life.”

This, adds the United Nations, involves four conditions: (1) adequacy of food supply or availability; (2) stability of supply, without fluctuations or shortages from season-to-season or from year-to-year; (3) accessibility to food or affordability; and (4) quality and safety of food.

### **Causes of Food Insecurity**

The causes of food insecurity and malnutrition are complex, says IFPRI’s Pandya-Lorch. “In some cases, people are food-insecure because they don’t have the income to purchase the food they need. In other cases,” she adds, “they don’t have the income to purchase the inputs whereby they can produce their own food. In still other cases, they don’t have access to cultivable land, or they don’t have access to water. ”

“The most important of the many causes of food insecurity is poverty,” says Jules Pretty, director of the Center for Environment and Society (CES), University of Essex, Colchester, United Kingdom. He explains that lack of access to money means that people are unable to demand the food in the marketplace. They’re unable to develop their farms and their agricultural technologies to produce enough food to take away that hunger. “So,” sums up Pretty, “food insecurity means not enough food, but it has many different features that relate not just to production but to access and to poverty.”

In developing countries of Latin America, notes Miguel Altieri, a major cause of food insecurity is lack of access to land to produce food. “Most of the poor people in that region are situated in marginal environments – on hillsides and in remote areas, as well as in cities,” says Altieri, an associate professor and associate entomologist at the Center for Biological Control, University of California, Berkeley. Solving food insecurity, he adds, means addressing the inequities that have led people to poverty.



JULES PRETTY

## Needed Actions

Pandya-Lorch believes three fundamental actions need to be taken if the world is to make progress in reducing food insecurity:

- Rapid economic growth that involves the poor. She refers to this as pro-poor economic growth – growth that is broad-based and in many countries. Pandya-Lorch adds that it's going to have to be agricultural growth because that is where the poor and the food-insecure get their incomes from, directly or indirectly.
- Empowerment of the poor. We don't make them empowered, says Pandya-Lorch, but rather we have to create the conditions whereby they become empowered.
- Effective provision of public goods, which includes infrastructure, education and health, to enable the very poor and the food-insecure to escape poverty and food insecurity.



RAJUL PANDYA-LORCH

The world community, including FAO, national agencies and research institutes, non-government organizations (NGOs), donor agencies and the private sector, fund and operate programs ranging from outright feeding programs to incentives that provide credit, technology or education.

Food insecurity is a multifaceted problem; there is no one solution. Although some of the causes, such as war, civil unrest and international trade policies, must be dealt with at the national and international levels, there is a growing recognition that many of the problems of food insecurity may be resolved at the local community level. “I think community-based food systems have an important role to play in assuring food security,” says Pandya-Lorch. “Remember, people live in communities. They don't live in boxes, and if we do not tackle food security at the community level, we will not make a difference anywhere. Community-based food systems offer people an opportunity whereby they can improve their incomes, their livelihoods and their capacity to produce, and basically an avenue by which they can assure their own food security in the future.”

## Community-Based Food Systems

What are community-based food systems? They are food systems that include characteristics or dimensions such as:

- Stronger connection between consumers and producers;
- Distributed food production, reducing local community dependence on food from outside the community;
- Diversification of the local food supply, providing local consumers with more diverse food choices;
- Recognition of the specific cultural and social food preferences and needs of the community; and
- Creation of jobs and economic diversity and vibrancy to the local community by using food and agriculture as an economic engine.

Community-based food systems are also focused on producing food in a healthy, environmentally sound way.

These systems are emerging in both the developed and developing nations as a parallel alternative to the industrial food system, which tends to focus on the efficient production of commodities for global markets. In this global system, farmers' production is usually shipped far away for processing and/or consumption – thereby generating limited economic value to the community where it is produced.

Community-based food systems enterprises tend, because they are focused on producing food for local consumption, to be smaller in scale and scope than enterprises linked to industrialized agriculture. As a result, community-based food systems tend to put money in the pockets of farmers with small and mid-sized farms.

### A U.S. Community-Based Food Systems Enterprise

Patchwork Family Farms of Columbia, Missouri, is an example of a community-based food systems enterprise that is increasing income for small and mid-sized farms, and creating jobs and economic activity in the local community while providing local consumers with quality food.

Patchwork Farms is a marketing cooperative organized in 1992 by three families. It now has 15 independent family hog farmers, all of whom have agreed to raise their hogs following strict standards, including not using growth hormones; no continuous feeding of antibiotics; providing adequate amounts of sunshine, fresh air and quality feed necessary to maintain good animal health; and using environmental stewardship and sustainable growing practices.

Member families market their hogs through the cooperative, with the hogs slaughtered and pork processed at a federally inspected, family-owned locker in nearby Hale, Missouri. The meat is then sold by the cooperative, under the Patchwork Family Farms label, to 60-plus area restaurants, grocery stores and other retail outlets.

Murray's Restaurant, Columbia, Missouri, has been a Patchwork customer for five years. "There are two reasons why we like to buy from Patchwork," says Bill Shields, co-owner of Murray's. "From an ethical standpoint, I think it's good to buy from local and smaller producers, and from a purely business standpoint, it's the best product there is.

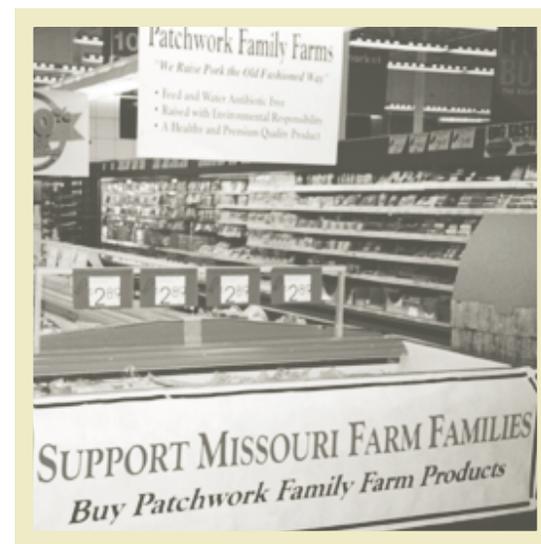
"In fact," he adds, "if we weren't buying from Patchwork, we wouldn't have the pork chop on our menu. We buy as many chops as we can. We never had pork before that was so good."

It was quality that also sold Ed Johnson, owner of the Broadway Diner in Columbia, Missouri, to buy from Patchwork. "The quality of Patchwork Farms' pork is unparalleled," he says.

As for price, Johnson says Patchwork's sausage and bacon might cost him a penny or two a pound more, "but the quality I get far exceeds the price I have to pay, and my customers are worth the extra two cents I put on the plate."

Johnson also likes supporting a local business. "I think it's worth it to support your local businesses and keep your local economy strong ... I'll always support local enterprise and especially Patchwork Farms and their products."

Walker Claridge, co-owner of the Root Cellar grocery, Columbia, Missouri, also sees economic and social advantages when local farmers and consumers connect. "Family farmers preserve the rural areas close to our cities, and we in Columbia really like to see that happening," says Claridge. "It's a very important mission to counter urban sprawl, to bring our community close, to get the farmers to where they're making money and they're coming into town and shopping from local businesses."



PATCHWORK FAMILY FARMS SUPPLIES LOCALLY PRODUCED PORK TO 60-PLUS RESTAURANTS, GROCERY STORES AND OTHER RETAIL OUTLETS IN THE COLUMBIA, MISSOURI, AREA.

Patchwork's expansion and sales have been steady. In 1997, Patchwork earned \$60,000 in gross sales. That figure jumped to \$112,000 in 1998, and more than doubled by 2001, reaching more than \$300,000 that year.

By cutting out the middleman, Patchwork's member hog farms received, as a group, \$32,000 more in 2001 for their hogs than if they had sold the same pigs on the open market. "Patchwork is paying at least 15 to 20 cents a pound (live weight) more for our hogs than what the packers are bidding us, and that adds up to quite a bit more on a 260-lb. hog," says Harry Dougherty. He and his family, which includes his son, Harry, and his wife, Brenda, have a membership in Patchwork.

"The prospect of getting better prices for our hogs is what piqued our initial interest in Patchwork," says Brenda. But the family also liked what the cooperative was doing for small family farms and the community. "I feel much better about working with family farmers than a big corporation. We're trying to keep all families on the farm. This is not just for money – it's for us to be able to live on the family farm."

Patchwork has also helped break down the barriers that keep farmers and urban people separated, notes Rhonda Perry, program director of the Missouri Rural Crisis Center. Patchwork Family Farms is an economic development project of the Center.

She notes that Patchwork operates a retail outlet in the lowest income neighborhood of Columbia. In addition, she adds, Patchwork producers work together with one of the largest African-American churches in inner-city Kansas City to build rural-urban understanding and cooperation.



PATCHWORK FAMILY FARMS MEMBERS HAVE WORKED TO BUILD RURAL-URBAN UNDERSTANDING WITH CONSUMERS IN THE INNER CITY OF KANSAS CITY, MISSOURI.

## Community-Based Food Systems Application in Developing Countries

Community-based food systems, with its focuses on (1) farmers producing for the food needs of the community, and (2) using agriculture as an engine of economic activity for communities, offers great promise as one of the solutions to alleviate food insecurity in developing countries.



MIGUEL ALTIERI

Most of the world's poor and hungry people live in low-income, rural areas of food deficit countries, notes the FAO in its Special Programme for Food Security Web page. "For most of these countries," it adds, "one of the best options for improving food security and nutrition is to increase the agricultural production of small farmers. The agricultural sector is the main provider of employment, food and income for these countries. Agriculture development is therefore vital to enhance poverty alleviation and peoples' access to food."

Miguel Altieri, who has extensive experience with community-based food systems in Latin America, recommends the following set of principles to promote community-based production systems for the poor:

- Regenerating and conserving the natural resource base;
- Diversifying the production system so people get nutritional diversity;
- Minimizing the need for external production inputs; and
- Utilizing natural resources that are local as well as the skills and traditional knowledge of local people.

### **Community-Based Food Systems in Latin America**

Farmers face challenges as they strive to increase income for themselves and their families and as they select the best technologies for their farms and the communities in which they live.

The International Center for Tropical Agriculture (CIAT) in Columbia, South America, is assisting communities in helping local farmers increase food production by empowering them, and their communities, to carry out their own research and make their own decisions regarding new technology and practices. Susan Kaaria is a senior fellow with the Participatory Research Program at CIAT.

The first step, says Kaaria, is for a community to form a local agriculture research committee. “In Latin America such a committee is called a Comité de Investigación Agrícola Local (CIAL).” CIAL members are selected by the community to facilitate and manage the experimentation process on behalf of the community, based on the community’s priorities, says Kaaria.

The research and decision-making process utilizes Farmer Participatory Research (FPR) approaches and involves all members of the community, she explains. This insures that input is received from all community members, including women and the poor, for consideration. “The CIAL then conducts the research and reports back to the community,” says Kaaria.

The CIAL concept has “scaled up” rapidly in Latin America since the first five CIALs were formed in 1990. By 2001, says Kaaria, there were more than 250 CIALs in eight Latin American countries.

CIAL research usually starts by addressing the community’s food deficit problems. Many are involved in searching for better crop varieties. Kaaria adds, however, that as communities’ food security improves, their CIALs begin conducting research on more complex issues such as integrated pest and disease management; soil, water and nutrient management; and small livestock production.

Kaaria cites the local agricultural committee, El Diviso in El Jardin, a village in Cauco, Columbia, as an example of a committee that has successfully assisted its local farmers and community. “El Diviso started by doing research on maize (corn) varieties,” relates Kaaria. The seed that area farmers had been growing was a hybrid with a 180-day maturity, which meant they could plant only one crop a year. This left a long period between crops – a time when food often ran out. “They called this period from June to September the hungry season,” she recalls.



RURAL COMMUNITIES ACROSS LATIN AMERICA ARE RESEARCHING SOLUTIONS TO THEIR FOOD SECURITY PROBLEMS, UTILIZING LOCAL AGRICULTURE RESEARCH COMMITTEES, OR CIALS.



SUSAN KAARIA

The community started looking for a maize variety that would mature much earlier so they could plant two crops a year. “They tested a lot of different varieties,” recalls Kaaria.

The best option turned out to be an open-pollinated variety. “It matures in around 90 days, allowing the variety to be planted twice a year,” says Kaaria. In addition, she adds, the community preferred the early-maturing variety’s taste and cooking qualities. Another benefit of the open-pollinated variety was that farmers could keep their own seed and plant it. With hybrid seed, they would have had to buy new seed for every planting.

After testing and selecting the 90-day variety, El Diviso converted into a seed-producing enterprise to produce and sell this seed to farmers in the community and in neighboring communities.

“The seed enabled farmers to significantly increase food production,” says Kaaria. The increased corn production, in turn, stimulated community members to begin raising more poultry and small livestock. This, she adds, has important implications for food security since livestock production is one way the poor can begin accumulating assets.

“What is really beneficial,” says Kaaria, “is when a group of farmers like the CIAL is able to become like scientists. They find a solution to the problem, they share it with the community – and when that happens they have built a capacity that enables them to address new problems as they arise in the community.”

CIALs, by their inclusive makeup, help ensure that new practices and technologies are evaluated in the context of the local culture and include local knowledge. “Communities are very unique in how they see things,” says Kaaria. “They have different priorities, different culture, and so by working within a community context, it helps to look at the problem in a cultural context.” Kaaria says farmer participatory research can also empower farmers to make more effective demands on institution-based research services.

Kaaria, a native Nigerian, believes involving and empowering communities to solve their own food insecurity problems is a model that will work in communities outside of Latin America.

“We have taken the lessons we have learned in Latin America, and adapted them to other cultures and countries, such as Uganda and Malawi in Africa,” she says. “Our preliminary results show that with modifications, the principles behind the CIAL model are applicable in other contexts.

“While there are many similarities in the causes of food insecurity in Latin America and Sub-Saharan Africa, there are differences as well. For example,” says Kaaria, “the biggest challenge we face in promoting a south-south information exchange is the language barrier, which makes it difficult to share knowledge.”

There are also other community and cultural differences, she notes. For example, communities in Latin America may be 40 or 50 families, while a community in Africa is often much larger. And, she adds, in Columbia women play a big role in food processing but not in food production, while in Africa any food project must involve women.

“In Sub-Saharan Africa, women produce 70 percent of the food,” Kaaria notes, “so they have a key role in the work that you’re doing. These differences will all have implications for how we adapt and modify the CIAL approach for African conditions.”

### **Community-Based Food Systems in South Africa**

Women are playing the lead role in poor, rural villages in Ga-Sekhukhune (Sekhukuneland), Limpopo Province, South Africa, to fight malnutrition and bring food security to the area. There, as in El Jardin Village in Columbia, the community approach was coupled with farming practices that minimized the need to buy outside production inputs.

The community program in Limpopo Province (formerly the Northern Province) started in 1991 with one woman in one village, then a group of about 10 women in another village. It has now spread to about 44 villages, each ranging in size from 300 to 700 homesteads, says Roselyn Mazibuko, director of the Health Promotion Unit at the School of Public Health, University of the Witwatersrand in Johannesburg, South Africa.

The women were motivated to take action from seeing malnutrition and the toll it was taking on their children, says Mazibuko. Protein and micronutrient deficiencies are prevalent in South Africa. A 1999 National Food Consumption Survey conducted by the government found that one out of two children had an intake of less than half the recommended level of energy, vitamins A and C, iron, zinc and calcium.

The program focused on the village women organizing gardens in the community to produce their own food. The women utilized trench gardening in which they would dig a 4-foot by 8-foot trench a few feet deep, and fill it with fertile soil. They also learned how to garden with no purchased inputs – even shunning the purchase of manure for fertilizer. Instead, they used whatever was available, including garbage, says Mazibuko.

For pest control, they drew upon the knowledge of the older people who remembered how they fought pests before chemical pesticides. These methods are saving money and are safer, says Mazibuko, “as many of the women farmers are not able to read instructions on the pesticide labels. Instead of pesticides they used techniques such as growing marigolds to repel insect pests.” Women worked in groups of 10 or so, helping one another dig the trenches, carry water and tend their gardens. They also worked together to coordinate their planting so gardens would be producing fresh vegetables the whole year through – to eliminate gaps in home-grown food availability by sharing their produce and reducing spoilage.

This program is showing benefits. “When we started working with the women, there was a lot of despair,” says Mazibuko. “Some of the signs of success are not tangible ones, but when you see the women and their children, who used to cry with a very low cry now singing and dancing, you know there has been improvement.

“We also notice the improved performance of the children in school,” says Mazibuko. And, one other major measure of improvement is the drop in the occurrence of night blindness, the result of vitamin A deficiency.

“This system not only managed to address the problem of starvation, but has also united the people,” concludes Mazibuko.



WITH THEIR CHILDREN DEVELOPING NIGHT BLINDNESS, STUNTED GROWTH AND OTHER NUTRITION-RELATED DISEASES, MOTHERS IN GA-SEKHUKHUNE, SOUTH AFRICA, ORGANIZED A COMMUNITY GARDEN PROJECT TO GROW THEIR OWN FOOD.

## Community-Based Food Systems in Cambodia

A community-based food systems approach has also been instrumental in increasing food production in 68 poor, rural villages in Cambodia – reducing the incidence of malnutrition among mothers with children 5 and below from 89 percent to 68 percent over the past three years.

Lot Miranda, country director of the Swiss Interchurch Aid (HEKS) Cambodia Program, says that as of December 2001, more than 84 percent of the entire populations of these villages were living below the poverty line. In 12 of the villages, more than 95 percent were below the line. Ironically, he notes, “the people in all these villages were farmers – relying entirely on agricultural cultivation for their way of life.”



Our studies have identified 28 reasons why these people were poor, says Miranda. “It begins with very limited land to cultivate, very poor soil conditions, illiteracy up to 50 percent, and expensive farm tools and seeds.”

The HEKS Cambodia Program includes two initiatives, the Rice Seed Credit Bank and the Health and Nutrition Improvement Campaign. The seed bank has been particularly effective in helping the farmers save money, says Miranda. In the past, farmers were charged up to 240 percent interest when they borrowed money to buy seed.

The project granted initial capital to buy seed in one bulk purchase. The seed was then loaned to farmers for planting with the understanding that they would return the seed plus five to 10 percent at harvest – 20 times less than they paid before the project began. The seed bank has been so successful that seed stocks have increased by 33 percent in the past seven years. The bank is able to loan more each year, and the program has expanded to other villages.

THE COMMUNITY RICE SEED CREDIT BANK HAS HELPED CAMBODIAN FARMERS REDUCE SEED COST AND INCREASE LOCAL SEED STOCKS 33 PERCENT.

The Health and Nutrition Improvement Campaign provides villagers with nutrition education and skills training. Villagers have learned to grow vegetables and raise pigs and poultry. This diversification of food production has been a key to reducing malnutrition in the villages, says Miranda. Prior to the program, farmers concentrated on growing rice, allowing for little diversity in villagers' diets and little fresh food between crops. Now they grow pumpkins for vitamin A, green leafy vegetables for iron and other vegetables for vitamin C.

The aim of the HEKS Cambodia Program is to provide lessons and resources to help villagers improve their lives by themselves – and to help communities become self-sufficient and food secure.

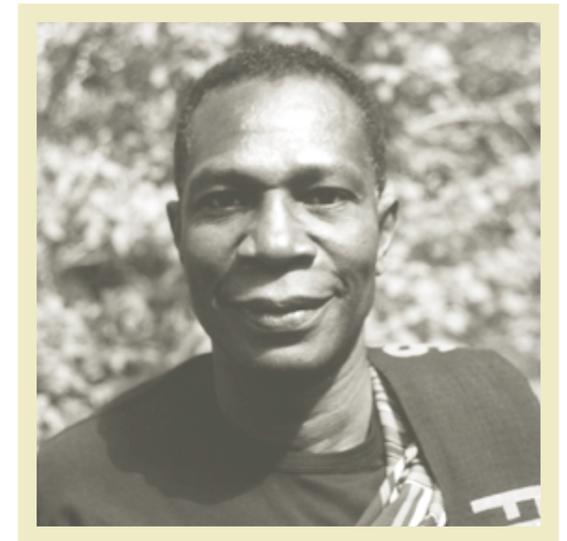
### Providing Communities Education Support

Education and testing of farm practices and technologies is best done on the local farms and villages with the people who will be using them. However, area training centers also can be effective. That has been the experience in the African country of Ghana. “The Kumasi Institute of Tropical Agriculture (KITA) was established to address food security in Ghana,” says Noah Owusu-Takyi, the Institute’s founder and director.

The biggest food security issue in Ghana, notes Owusu-Takyi, is not lack of food but lack of adequate protein in the diet. “Fish is expensive and our livestock production is not developed,” he explains.

Local fruits and vegetables are available, he adds, but inadequate storage, preservation and management limit their out-of-season availability. “The Institute serves eight communities of about 2,000 farmers, all of whom come to the Center from time to time to discuss their problems and how we can help them solve the problems,” says Owusu-Takyi.

“We have moved to community projects,” he says. These include bee projects to teach communities how to produce honey – primarily to sell for income – and community fish ponds.



NOAH OWUSU-TAKYI

In the fish pond program, the whole village is brought together to plan the project, including determining where to dig the pond and selecting the people to be trained at the center to manage the project.

A major focus of the Institute is to encourage young people to farm. The image of farming among young people is not good, explains Owusu-Takyi. To get youth into farming, they have identified non-traditional farming enterprises that young people can undertake with a minimum of capital or land. Enterprises included in their program include snail raising, fish farming, beekeeping, mushroom raising and vegetable production.

The program, he says, has encouraged many youth to begin farming.

### **Experience in Mexico**

Training centers have also been very effective in Mexico. The Group to Promote Education and Sustainable Development (GRUPEDSAC) operates a center in Piedra Grande, Huixquilucan, Mexico, training rural men and women in subjects ranging from using alternative technologies to reforestation.

“To us education is basic for future development,” says Margarita Barney de Cruz, president and co-founder of GRUPEDSAC. “I think if you really want to have sustainable development, it should be based on education and training. We are convinced of that. I’m hoping, and I think it’s going to be real, that many of these training centers are duplicated or multiplied in Mexico and in Latin America.

“We have seven different programs,” she explains. “We work with rural women, we train on alternative technologies and what we call eco-technologies, and we work with the youth and men and women. We also work on reforestation practices and waste management.

“The problem in rural areas is that people have lost diversity in their foods and have concentrated on growing maize (corn) and beans and chili,” says Barney de Cruz. “That’s why there is malnutrition in the area.”



MARGARITA BARNEY DE CRUZ

The GRUPEDSAC training center teaches farm families ways to diversify their food production, including how to raise chickens, rabbits, turkeys and pigs. “Food security is increased considerably because they are able to have meat (protein) every day if they want to,” says Barney de Cruz.

“These projects are community-based because there is family production, and there can be community production, too,” says Barney de Cruz. “In a period of two or three years, they can increase their income four times. They first become self-sufficient in food,” she explains, “and then they have extra food to sell, and as they also become trainers of others, it’s a farmer-to-farmer network; they share their knowledge, and the rest of the community copies or learns from the others, and so they can all get together. The community gets together and sells to the market. That way they can also have better income.”

## Conclusion

Community-based food systems will not, by themselves, solve world hunger. As noted, the causes of food insecurity are many and complex. Many approaches are needed.

Some causes, such as war and trade policy, must be dealt with at the international and national levels. And, hunger brought on by acts of nature, such as drought and floods, will at times require immediate response from emergency feeding programs.

But a close look at world hunger statistics finds that a great majority of the chronically hungry live in low-income, rural areas of food-deficit countries. These are people who are largely outside the global food system. They are people who are starving because they are poor, without the resources to buy food or access to land to raise enough food to feed themselves and their families.

As FAO notes, one of the best options for improving food security and nutrition in these regions is to increase the agricultural production of their small farmers. Community-based food systems, with their focus on connecting farmers and consumers at the community level – to serve the needs of the community and create sustainable economic development – fit almost exactly the opportunity noted by FAO.



A COMMUNITY-BASED FOOD SYSTEMS APPROACH HAS BEEN INSTRUMENTAL IN REDUCING MALNUTRITION AMONG MOTHERS WITH CHILDREN FROM 89 PERCENT TO 68 PERCENT OVER THE PAST THREE YEARS IN 68 RURAL CAMBODIAN VILLAGES.



WOMEN IN LIMPOPO PROVINCE, SOUTH AFRICA, WORKED TOGETHER TO TILL, PLANT AND WATER THEIR GARDENS TO GROW FRUIT AND VEGETABLES FOR THEIR FOOD-INSECURE VILLAGES. THE PROCESS NOT ONLY ADDRESSED THE PROBLEM OF STARVATION, BUT ALSO UNITED THE PEOPLE.

“Community-based food systems have enormous potential for bringing food security to people who are currently outside the system,” says Jules Pretty. “All the examples we have seen of community-based systems in industrialized countries have similar principles to the ones that have emerged in developing countries” he notes, “which is that they involve social organization, people getting together and providing greater effectiveness because they are working together, and because they trust each other.”

That is happening among the 15 independent family farmers in Patchwork Family Farms, Columbia, Missouri, who realized that they needed to work together and produce for the local market to keep their family farms in business. It is happening with the women in the 44 villages of Limpopo Province in South Africa, who banded together to grow the fresh fruits and vegetables their children needed to stave off blindness, stunted growth and other malnutrition-related illnesses.

It is happening in 68 poor, rural villages in Cambodia, where the farmers now have a seed bank and are diversifying part of their food production into raising vegetables, pigs and poultry for their families and communities – reducing both malnutrition and poverty rates.

And, it is happening in the 250 communities with local agriculture research committees in eight Latin American countries, where local communities and farmers are becoming empowered to do their own research into appropriate new food production technologies and practices, thereby

helping local farmers produce more of the food their communities want and need.

These community examples from the United States, South Africa, Cambodia and Latin America are all very different. Yet, each community is utilizing elements of community-based food systems, helping people help themselves, to improve the income of small farmers and to better meet the food security needs and economic outlook of their communities.



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