

# A Program for Building Self-Reliant Families among the World's Rural Poor

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The mission of the Benson Agriculture and Food Institute (BAFI) is to raise the quality of life through improved nutrition and enlightened agricultural practices. BAFI programs focus on poor, farm families in the developing world. It is not a subsistence farming initiative. Rather it is a program to bring families to nutritional and then economic self-sufficiency by enabling them to produce sufficient for their families and then to produce a surplus for sale on the open market.

BAFI works cooperatively with local, in-country universities who identify villages and areas where there is a need and a willingness to be part of a developmental intervention. The village school is the primary target for initiating the work. Children are taught the fundamentals of gardening and small-animal production. Through the auspices of a school lunch program, the mothers come to the school to learn how to incorporate that which has been produced into the diet of their families. The school children learn to eat and enjoy that which they have learned to produce as a part of the school's educational program. Mothers and children then take home to their husbands and fathers how the small-scale agricultural model might be used on their farms.

With support from BAFI, faculty and students from the cooperating universities, as well as those from Brigham Young University, research agricultural and nutritional problems which are unique to those regions. Agricultural technology is highly location specific. As a result of such research, some rather remarkable location-specific technology has been developed along with technology transfer mechanisms that are helpful in solving problems faced by small-scale farm families who operate on a land base of one to ten hectares.

For example, BAFI developed underground greenhouse structures that enable vegetable production for nine months of the year at an elevation of fourteen thousand feet on the Bolivian Altiplano. Small-scale poultry production has been especially successful. Poor people can buy eggs even when they have insufficient means to buy broiler chickens. Rabbits, which multiply rapidly, have not worked as well for protein production, because families tend to keep them as pets. In contrast, growing guinea pigs for meat protein does work well with some cultures.

Affordable technology that is adaptable to local conditions is a key criterion for determining merit. In some cases, special processing/preparation methods must be

found to make crops appropriate for human consumption. Such proposals are developed by the faculty and students of the cooperating universities in keeping with BAFI and community needs and objectives. The in-country university students become a chief delivery mechanism for teaching and training villagers. As a part of their theses research, they develop educational materials and teach the lessons learned to the villagers. This process tends to shorten considerably the time span between discovery at the university and field application.

There is a technology transfer challenge with research that has been done using the talents of Developed World students and faculty. Not infrequently, that which is learned in the United States does not, in a timely fashion, find its way back to the small farmers of the Third World. The tendency in academia is to publish in a learned journal and assume the work has been accomplished. Successful publication is a principal evaluative criterion used in decision making in the economic/social reward system of professionals in American higher education. However, agricultural development requires the productive application of knowledge for sustained improvement to occur. It is also vital for building and retaining private donor support. Donors want their contributions to make an observable difference.

We have noted an increasing skepticism among Third World peoples, who have been the object of academic research in which there has been little by way of productive application of what was learned. Mass communications have opened the windows of possibility to Third World, small farmers. They expect researchers to keep commitments, stated or implied, and they further expect that as a consequence of their cooperation, researchers will assist them in making a measurable improvement in their socio-economic situation.

Graduating students have a meaningful experience in technology transfer and public service. Such experiences bode well for educating university graduates, who are service minded and have the capacity and desire to lift and lead their countrymen toward nutritional and economic self-sufficiency. In short, we also attempt to build a new cadre of effective and concerned leadership for the nations wherein we serve.

During the last decade, approximately five thousand families have been directly assisted with this program, and 244 in-country research theses have been completed. Additional information regarding BAFI may be obtained

by accessing the web site at <http://benson.byu.edu>. Many materials are available in Spanish as well as English. Some materials are available in French.

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**Problem:** There are 800 million poverty-stricken, small-scale farmers and their families. Improving their circumstances is a complex problem:

- Hunger drives people to do things, to take chances they would never otherwise take.
- For half a century we have attempted to do something about the poorest of the poor, and success has been minimal. Some of that is traceable to the notion that educated people do not work with their hands, which cultural attitude may well descend from the colonial era.
- For a nation's political leadership, it is no longer a case of just worrying about angry people in urban areas, for there is increasing evidence of hostile rural activism.
- The technology of the green revolution may have made the life of the poor more difficult as rich nations dump cheap food on the international market. Furthermore, there is some evidence that given a choice between equally priced local- and foreign-produced commodities, the people are choosing the foreign commodities.

**Classical Approach:** Governmental agencies such as USAID and the World Bank have given money, but the funding has not efficiently made it way to the villagers—the poor, rural farm families.

- USAID exists first to support the foreign policy agenda of the United States. Large projects are intended to make a friendship statement. However, a large irrigation dam without people and a system to distribute the water, does not result in change at the local or village level.
- Villagers are increasingly aware of that there is donor money in the capital.
- They understand the bureaucracy sees to their own needs first, and they are increasingly discontent with how little spills over the bureaucratic cup. While they may be illiterate, they are not ignorant of inefficiencies associated with the use of donor money.
- Ask yourselves: "Can our universities be more effective in serving the our nation's economic development?" For example, not infrequently it is the personal professional agenda or an institutional academic reputation that is being pursued. Can you really afford that?

**Benson Agriculture and Food Institute (BAFI) Approach:** Our program is directed at the poorest of the poor. It is a nutritional, agricultural-based program.

- We first get governmental approval.
- We stay out of local politics; we are an educational and humanitarian institute; we do not have a political or religious agenda as we work with peoples of all faiths and persuasions.
- We identify a cooperating university who then helps us identify target village schools.
- The university and the village schools and their personnel become key agents in our intervention process.
- We expect the cooperating, in-country scientists to contribute their time, although we partially fund the relevant thesis research of their students.
- Most of these families have inadequate levels of energy, protein, Ca, P, Fe, Vitamin A, B-12 and clean water in their diets. Parasites and infection interfere with absorption across the intestinal wall. It is helpful if you can attack the problem on all fronts.
- The program begins with what they have: their land base, their labor, and their willingness to work.
- There are differences in ability and in a willingness to work to solve their problems.
- We attempt to avoid creating an expectation of an entitlement or a dependency upon us.
- We encourage saving for future reinvestment.

**Components:**

- Gardens that feature vitamin-rich vegetable production.
- Small animal production to improve both the protein and energy levels of the diet.
- Crop production to meet both family and small animal nutritional needs, *i.e.*, corn, beans, and forages.
- A production element that can be used to generate income for the family. This requires a sensitivity to market opportunities. For example, we are helping Ghanaian farmers produce eggs that other families can afford to buy. At this point, we are not helping them grow broilers, because local villagers can afford broilers only for special occasions.
- We occasionally have done small infrastructure projects such as two culinary water systems in Ecuador, small libraries for village schools in Guatemala, and some scientific equipment for cooperating universities.
- In Ecuador, a ranking governmental official said of a major donor agency, "They have the money, but you have the program."