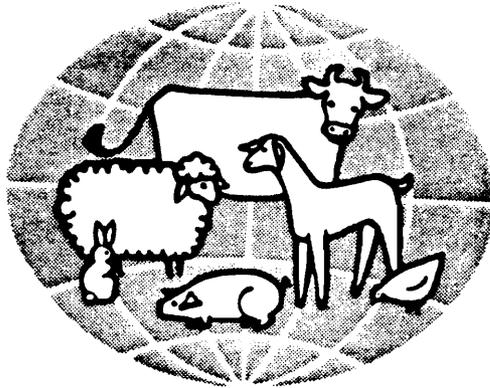


HPI COMPREHENSIVE LIVESTOCK DEVELOPMENT PROGRAM

USAID MATCHING GRANT PDC-0258-G-SS-5137-00

FINAL REPORT



HEIFER PROJECT INTERNATIONAL

August 11, 1988

Report Covers Period of 9/85 - 9/88

Heifer Project International
Matching Grant II
Final Report

Summary

This report examines the progress accomplished under the HPI/USAID Matching Grant PCD-0258-G-SS-5137-00. This grant covers the period of September 1, 1985 to September 30, 1988. The total amount of the grant will be approximately \$3,653,610 of which USAID provided \$1,315,000 and HPI will provide \$2,338,610 in matching funds.

During the grant period HPI has developed or intensified country programs in Bolivia, Dominican Republic, Ecuador, Kenya, Uganda, Zimbabwe, Zambia, Indonesia and Thailand. Livestock projects in these countries have been supplied with livestock, equipment, animal health care and training resources. Over 20,000 people have been trained in livestock management and care. Estimates of the number of animals distributed are as follows: 3,754 cattle, 526 sheep, 800 goats, 628 pigs, 67 alpaca, 41,320 chickens, 95 guinea pigs, 1,100 quail, 134 buffalo, 118 ducks, 273 beehives, 367,867 shrimp and 665,884 fish.

Information on aspects of livestock in development projects has been diffused through distribution of The Exchange newsletter to over 12,750 people and/or groups, and a technical information service which filled 12,000 requests for information. Four action-research projects have been completed and seven Conferences, six Regional Encounters, two Regional Director's Meetings and four International Training Meetings have been held.

Many organizations have grown through HPI involvement. New organizations such as Terra Nova and the Institutional Committee for Technology Transfer and Extension (CITTE) in the Dominican Republic and the Asociacion Ecologica del Oriente in Bolivia have been developed. Growing cooperation with governments and other PVOs has brought about policy changes which benefit the small farmer. New and old livestock methods such as zero-grazing, oxenization, guinea pig production and regenerative aquaculture gained popularity and spread throughout countries.

Likewise, through its relationship with USAID, HPI has undergone organizational growth. It has increased its staff, developed a new Management Information System (MIS), and revised its accounting system. An HPI/USAID Mid-Term Evaluation which was completed in 1987 served as a valuable tool in HPI's future planning.

The professionalism and field experience gained through this grant will have long-lasting effects on HPI, cooperating national organizations, and the future of many poor farmers in developing countries.

Heifer Project International
Matching Grant II Final Report

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MATCHING GRANT II FINAL REPORT

I. BACKGROUND TO GRANT AND PROJECT CONTEXT

Heifer Project International (HPI), with the help of USAID Matching Grant PDC-0258-G-SS-5137-00, continued the process of working to alleviate poverty and hunger by providing livestock, technical assistance, and training to the rural poor. With Matching Grant funds, which span the three year period of September 1985 through September 1988, HPI intensified or developed country programs in Kenya, Uganda, Zimbabwe, Zambia, Dominican Republic, Bolivia, Ecuador, Thailand and Indonesia.

HPI is a private voluntary organization supported mainly by church-related groups and individuals. It is headquartered in Little Rock, Arkansas with field offices in eight developing countries. The staff of 153 consist of animal and development specialists, financial and fundraising staff, clerical office staff, and development education specialists.

HPI combines resources such as livestock, training, and equipment with local resources such as organizational support, grazing land and fencing to supply a complete package for the rural farmer. The farmer then has a regenerative means of supporting the family, and is also given the chance to assist other community members who are in need. Those receiving animals agree to "Pass on the Gift" by sharing an offspring of their animal or some of the proceeds with others. Through this process a high level of community involvement is achieved and the number of beneficiaries increase over the years.

The Role of Livestock in Economic Development

HPI has found that livestock, a major source of income for millions of people throughout the world, are a viable and appropriate vehicle for bringing about economic development for limited-resource rural farmers. Livestock are well suited to many climates in which farming is difficult or impossible. In arid and semi-arid lands, where permanent cultivation of the land leads to barren deserts, nomadic pastoralism has prevailed through the ages. For people with little and/or poor quality land, livestock is a cost-efficient way of converting marginal foliage into food items.

Livestock fit well into many integrated farming systems by converting materials unusable by humans into foods, fiber, and fertilizer. The fertilizer in turn replenishes the soil. Animal traction power is often used in planting, harvesting and transporting crops. The food provided by animals also adds to the variety and nutritional quality of human diets, often providing the protein lacking in the diets of the poor.

HPI Principles

The HPI system of development assistance is based on two fundamental principles: that the basic unit of the work is a community-level project, and, that the program and projects are shaped and driven by the expressed needs of the people who participate in the project. This grassroots, participant-based strategy insures that the aid given is appropriate for the recipients and that the poor are the actual beneficiaries of the projects.

One additional outcome of HPI projects, perhaps as valuable as the increase in individual income levels and food production, is the stimulation of community development. HPI livestock projects enhance this process in a number of ways. Community member participation is strengthened because the assistance offered is perceived as appropriate and valuable. This is insured by the community initiation and control of the project.

HPI livestock projects require long-term attention in order to be successful. This is due to the technical capacities which must be developed, the length of the regenerative cycles, and the sustainability of the project due to the "Passing on the Gift" element. Because the local groups are united around a long-term goal, the chance of their development into an established community organization is increased. In many cases this new alliance of previously unorganized neighbors has been the stepping-stone to new types of community self-help activities and has even helped some groups to gain a voice in the political arena.

As an example, in Egypt, the government policy was changed to allow farmers with only one cow to purchase subsidized feed and insurance. In Uganda the government is basing its small-holder dairy development program on the HPI model. In Zimbabwe, increased extension services have been leveraged by project activities, including access to loans.

HPI, with Matching Grant funds, has concentrated many of its resources in certain country programs. By placing staff and an office in the targeted areas, HPI has built solid programs which are able to support continued livestock development and organizational development, provide technical assistance and encourage networking between the various community organizations.

HPI Information and Technology

In addition to direct support of project participants with livestock and equipment, HPI is involved in the transmission of livestock information and technology. The emphasis is on appropriate technology – that which is available, tested, and useful to the low-income farmer. This information is distributed by means of The Exchange, a livestock newsletter sent to project holders and development workers worldwide, and with information sent in response to requests for specific information. In addition, technical assistance has been provided to project holders through consultants and volunteer visits.

Training also plays a large part in the HPI program. Individual livestock training is provided to project participants; livestock management and organizational training is provided to project and organization leaders; and regional and country-wide training conferences and workshops are held to facilitate the exchange of livestock management methods and organizational experiences. The development of a systematic training program will become a major emphasis in the future.

The Need

HPI responds to locally initiated requests for assistance from groups composed of subsistence, marginal and small-holder farmers. Many more requests for projects are received than can be implemented. Priority is given to those projects which are aimed at helping the poorest sectors of the population that can feasibly benefit from livestock projects.

One of the most common conditions of HPI project participants is the lack of adequate or fertile land. Raising livestock is an appropriate livelihood for rural people because livestock, especially ruminants, can process forage and crop waste materials into food products. In addition, much of the animal production by rural farmers in developing countries suffers from the lack of appropriate animal management techniques, poor quality animals, lack of appropriate feedstuffs and adequate veterinary care.

Many of HPI's projects are totally comprised of women, with others made up of both male and female members. Though the situation of rural women around the world differs widely, for many the ability to produce food for the family and to earn extra money provided by livestock projects increases both their income and status. Many livestock projects, such as the poultry projects in Bolivia and the zero-grazing projects in Uganda allow women to remain close to home so that they can also farm and care for the children.

Additional Resources to HPI Projects

Local participants are asked to contribute what they can to the development project. For a project to be approved by HPI, the necessities – animals, training, a feed supply, veterinary care, and animal housing – must be available from the project participant, HPI, or some other source. Many participants have access to a few of these elements but can never expect, without external funding, to acquire all the elements necessary to successfully raise livestock.

II. METHODOLOGY

The Comprehensive Livestock Development Program, funded by this Matching Grant has as its purpose the socioeconomic betterment of poor, small-farmers in Africa, Latin America and Asia through the provision of material inputs, animal and leadership training, technical support services and follow-up to livestock projects.

HPI has found that its most successful efforts have been those where local trust and understanding of HPI have been built, and where local groups and organizations have developed the capabilities to run the HPI projects. Because these processes are often lengthy, HPI's strategy has been to concentrate its efforts on building solid long-term programs in specific countries. The Matching Grant program has aided in the development or strengthening of programs in nine countries: Bolivia, Ecuador, Dominican Republic, Kenya, Uganda, Zambia, Zimbabwe, Indonesia and Thailand.

HPI Objectives

The objectives of HPI programs are to (1) increase the nutrition and income of small-farmers, (2) improve the capability of indigenous counterpart organizations and community groups to carry out livestock development projects, (3) to increase the number of rural families who benefit from projects through the "Passing on the Gift" system and (4) to improve the quality and quantity of training, technical services and follow-up to projects.

The HPI project consists of three major areas:

- o Rural Development Project Support
- o Technology and Information
- o Human Resource Development

RURAL DEVELOPMENT PROJECT SUPPORT

HPI supports locally managed livestock development projects through three basic inputs - (1) project funding, (2) personnel, and (3) shipments of supplies, equipment and livestock. Project support grants to partner organizations are used for items such as livestock, veterinary supplies, equipment, freight and feed supplements. Funding for training activities and supplies is also provided. High quality livestock from the United States is sometimes sent, when genetically superior animals are not available in the host country or neighboring countries. Semen, equipment, and veterinary supplies are also occasionally sent from the U.S.

The desired outputs of direct project support are a) community groups functioning with self-sustaining activities and b) animal offspring distributed and producing. (See Logical framework, Attachment 2A) In the MG period (Sept. 1985 - Sept. 1988) over 60 projects and 7 country representatives in 9 countries have been supported by Matching Grant funds. With Matching Grant funds over 20,200 people have been trained in livestock care and management. Project progress reports and 1988 estimates show the following livestock distributed: 3754 cattle, 526 sheep, 800 goats, 628 swine, 67 alpaca, 41,320 chickens, 95 guinea pigs, 1100 quail, 134 buffalo, 118 ducks, 273 beehives, 367,867 shrimp and 665,884 fish. The original logical framework contrasted with the current program status is enclosed as Attachment 2B.

A comparison of the original workplan of the proposal and the actual accomplishments during the grant period is enclosed as Attachment 3A.

In developing a country program, HPI uses a regional or country representative who is either a staff member hired and funded directly through HPI, or a contract representative who represents HPI through an agreement with a host-country organization. HPI has a Country Representative or consultant in Ecuador, Bolivia, and Thailand and contract representation in the Dominican Republic, Uganda, Zimbabwe, Kenya, and Zambia.

Three new contractual agreements for HPI representation have been developed in the last year. Christian Care in Zimbabwe, Christian Council of Zambia and Terra Nova in the Dominican Republic have agreed to administer HPI programs providing an office and staffing in the respective countries. More information on these new alliances is provided in the country specific section of this report.

TECHNOLOGY AND INFORMATION

A. The Exchange

Though there is no shortage of technical publications relating to animal production, there is a dearth of information which is appropriate and intelligible to the participants in livestock development projects. In order to share ideas and information on small-scale livestock projects HPI publishes a newsletter, The Exchange. This newsletter is sent to HPI project leaders and representatives, extension agents, development workers and others working directly with small-scale livestock development projects. The Exchange circulation has been expanding rapidly growing from a circulation of 300 in 1982 to 5300 projected for 1988. Through the MG period (9/85 - 9/88) 17 Exchanges will have been distributed. This is one short of the 18 proposed due to the fact that one of the issues was a combination issue. An example of a 1988 edition is included as Attachment 4A.

In addition to the Exchange, HPI responds to many requests for technical materials from a technical file and library located at the headquarters office in Little Rock. The number of requests has also grown very rapidly during this MG period, as illustrated by Attachment 3B.

B. HPI Productions and Publications

HPI staff, associates, and project holders have been very active in producing manuals, books and audiovisuals on both livestock and development topics. Basic manuals in animal husbandry are designed to be useful to the animal husbandry extension worker and teacher, using simple language, illustrations, appropriate technology, and specific instructions germane to different environmental conditions.

The translation of many of these into other languages has been undertaken by HPI. Raising Goats for Milk and Meat has been translated into Arabic and A Planning Guide for Small-scale Livestock Projects will be available in a French version. Dairy Cattle Husbandry is unique because it is a basic manual for small-scale dairy farmers written in Swahili.

These publications are in high demand as evidenced by the growing number of requests HPI receives for them each year. A list of HPI publications and media productions is included as Appendix 4B.

C. Action-Research Projects

In the search for livestock methods which are feasible, cost-efficient and effective, some project holders have participated in action-research projects. The development of local feedstuffs is a common theme. The research projects undertaken during this Matching Grant period were:

- o In the FCC-Luwu prawn project in Indonesia, several local fish farmers have participated in different trials to determine the most appropriate method for stocking fish.
- o In Bolivia a study of the native grasses of arid and subtropical areas done by a specialist in forage production aids in the planning of future livestock programs for the optimum forage usage and ecological sustainability.

- o In Zimbabwe the introduction of improved pasture species has been tested, as well as various feed mixtures for pigs.
- o In Indonesia HPI is assisting the PUSPETA project in the development and utilization of different feed packages for poultry, cattle and fish, using the available feed resources, especially crop by-products.

D. Conferences and Symposiums

HPI conferences and symposiums serve many purposes. They are attended by animal specialists, rural farmers, HPI staff, HPI project leaders, government officials and development workers. The conferences emphasize issues and ideas which are directly applicable to poor farmers in less developed countries.

The sharing of knowledge is important – the information in this field has few appropriate channels for dissemination. The dialogue started by this exchange of ideas also can have long-reaching effects, as in Bolivia where the development of a new ecological association, the Asociacion Ecologica del Oriente, was prompted by a HPI symposium.

Another outcome of HPI conferences is the networking opportunities between conference participants. In some conferences project holders have assembled to share ideas and experiences which has proven to be a valuable contribution to the HPI program.

One of the main purposes of the HPI conferences and symposiums is to train HPI project holders, technicians, representatives and other PVO staff working with livestock. Often, training events are either incorporated into the conference activities or occur before or after the conference. In order to take advantage lower travel costs, regional meetings of directors and project holders are held preceding or following the conferences. A listing of conferences, symposiums, training and regional meetings is enclosed as Attachment 3C.

Five major conferences were held during this MG period:

- o The International Conference on Alternative Agricultural was held in the Dominican Republic in June, 1988. HPI Project Holders, government institutions, private foundations and Haitian Project Holders met to discuss ways to produce locally grown feeds and the use of trees for forage production. The agenda of this meeting is enclosed as Attachment 4C.
- o The Symposium on Environmental Conservation, Santa Cruz, Bolivia in 1986, addressed issues of livestock and the environment. Thirty-two papers were presented and 182 people attended the event. Some lasting outcomes of the event include the publication of a monthly bulletin, which now has a circulation of about 400, and the organization of a new association, ASEO (Asociacion Ecologica del Oriente).
- o Eighty people attended the Conference on Tropical Animal Production & Leadership in the Dominican Republic on July 12-18, 1987 which gave training in animal husbandry skills by experts in the field. Attendees included project holders, HPI staff, PVO representatives (Service Christian, IICA, UNAPEL, Haiti Mission) and government representatives (i.e. the Governor of Santiago).

- o The HPI Africa Program Workshop was held in Arusha, Tanzania on October 26–31, 1986. This workshop provided HPI staff, other PVO staff and key contact persons in Africa an opportunity to share information and experiences from their respective livestock projects, to broaden their understanding about project planning, implementation and evaluation, and to gain new insights regarding workable methods and technical innovations for livestock projects.
- o A conference on The Ecological Impact of Raising Alpaca and Sheep in the Highlands was held in Bolivia in July of 1988. A synopsis of this event (in Spanish) is included as Attachment 4D.

HUMAN RESOURCE DEVELOPMENT (TRAINING)

HPI realizes that training is an essential part of any livestock program. Over the three years of the Matching Grant program, project participants and organizers were given technical training (e.g. storing fodder, trimming hooves, animal breeding); management training (e.g. keeping records, knowing costs and profits) and organizational training (e.g. setting up bylaws, contractual agreements).

Village level training is almost always required before a participant gains an animal. This training is done by either the HPI representative, someone from the host organization, or a local expert. Much of the training received by project participants is carried out on a project by project basis. HPI would like to improve its future training capabilities by developing a systematic training method. This would be accomplished by preparing a curriculum and training materials appropriate to the experience and climate of the small-holder producers.

To improve the capability of the project organizations, leadership training has been very important. At regional meetings and workshops, project holders, community leaders and HPI staff are given animal training, management training and the opportunity to share experiences.

Some of the 1988 training events are listed below:

In Bolivia local project members, selected by the community, attended intensive animal health training so that they can serve as para-veterinarians.

In Thailand 21 project holders toured other development projects, both small and large-scale. One outcome of this event is the production of a technical newsletter for project holders, written in Thai and a number of local languages.

The Fourth Annual Institute on Livestock in Development was held in Perryville, Arkansas. The participants consisted of experienced field staff, missionaries, students and program managers from nine countries. They received formal and informal instruction, as well as classroom and hands on practice. The proceedings of this conference are enclosed as Attachment 4E.

The Fifth Annual Institute on Livestock in Development will be held in late August of 1988. Thirty people from various countries will participate in hands-on learning experiences. A five-day study tour of US livestock projects will precede the tour and a four-day basic goat practicum will follow the event. Attachment 4F contains promotional materials for Institutes 2-5.

III. MONITORING AND EVALUATION

Project Monitoring

HPI monitors projects through semi-annual reports, visits by Country Representative, visits by Country Directors, and evaluations. Project holders are required to submit financial and programmatic information twice a year. Large projects (receiving more than \$100,000 annually) must submit financial reports monthly.

The financial information is entered into HPI's new Management Information System. This computerized system, put into place during 1986-1987, gives HPI access to more financial and budgetary information than was possible in the past.

The Mid-Year USAID Evaluation Team suggested that HPI revise its reporting and financial forms to make them more understandable to the project holders. HPI has begun this process by publishing a workbook to explain the process, step-by-step, to the project holders. HPI recognizes the need to revise the reporting and evaluation system, incorporating more baseline data, collecting gender-specific information and using very simple language in the reporting forms. This revision will come about as HPI's new database is integrated into daily operations.

This database, presently in the secondary phase of development, will organize and categorize the information contained in project holder reports. The database will make available project specific information as well as aggregate measures. For example, HPI will have access to information such as the number and types of animals purchased by region and/or continent, the number of people/training days funded by HPI, and the average pass-on rate for each animal species. The implementation of the database is progressing as scheduled.

Staff visits play an important part in monitoring, evaluating and providing organizational and technical guidance to the projects. In this Matching Grant period HPI headquarters staff have made the following number of visits to the MG countries: Ecuador (4), Bolivia (5), Dominican Republic (8), Zambia (2), Zimbabwe(2), Kenya (4), Uganda (3), Thailand (7) and Indonesia (4).

Project Evaluation

In the summer of 1987 a USAID/HPI evaluation team conducted a Mid-Term Evaluation of HPI's Dominican Republic and Zimbabwe Country Programs. The evaluation team consisted of USAID consultant Gordon Appleby, HPI consultant, Peter Limburg, and HPI Global Services Director, Armin Schmidt.

The evaluation team carried out field assessments of HPI's effectiveness in responding to the needs of project holders and project participants. Other factors studied were the appropriateness of livestock and technology package, the effectiveness of the "Passing on the Gift", the impact of training and the extent of institutional linkages between project holders and other development agencies and personnel. A previous evaluation of the Dominican Republic, completed in 1985 at the end of the first USAID/HPI Matching Grant, was utilized in the evaluation preparation.

The evaluation team ranked the projects highly. In their report they stated, "In conclusion the evaluation team wishes to express admiration of the HPI program... The program works adamantly for the rural poor through a grassroots approach that emphasizes farmers helping other farmers. The obligation to "Pass on the Gift" eloquently captures the genius of this program."

HPI has acted upon the recommendations of the evaluation team, for example, by making new staffing arrangements in Zimbabwe and the Dominican Republic. Many of the recommendations have been incorporated into HPI's long term goals. If funds become available, HPI will develop animal production curriculum for training modules to be used with small farmers, as recommended in the evaluation. HPI will also put into effect other evaluation team recommendations such as increasing the number of workshops, training programs, conferences, and exchange programs.

Many participant evaluation activities have been undertaken. Notable among these is the comprehensive evaluation of the Bina Swadaya project in Indonesia. Baseline data was collected by project leaders and an evaluation was done by a Bina Swadaya representative, along with an outside consultant. An internal evaluation of the Boliva Country Program was completed in 1988. For a listing of evaluations completed during the Matching Grant Period see Attachment 3D.

In October of 1988, a final internal evaluation of the Matching Grant projects in Ecuador and Bolivia will be conducted by HPI's Director of Latin America and Director of Budgets and Grants. The methodology developed for the Mid-term MG evaluation will again be utilized.

IV. REVIEW AND ANALYSIS OF PROJECT RESULTS BY COUNTRY

For a one page synopsis of country results see Attachment 3E.

BOLIVIA

During the Matching Grant period HPI, Bolivia has increased staffing at the local level, enhanced program monitoring capabilities and broadened the program scope. Major activities of the program during this Matching Grant period are summarized below:

UNAPEGA - This association is now five years old and has matured as a direct result of the HPI program. Membership numbers over 1,200 members and the association is administering 1,214 heifers and bulls under its agreement with HPI. UNAPEGA has been able to establish animal supply outlets in its eight districts and has aided in obtaining credit for a small cheese factory in one district.

New Livestock Areas - The Santa Rosa, Berlin, San Julian and Yucumo committees function outside of the UNAPEGA structure in a direct relationship with HPI. The para-veterinarian technicians from these areas, as well as from UNAPEGA attend monthly meetings in which they exchange experiences, consult with the project administrators and bring technical problems to the livestock technicians who advise the projects. In the newer areas, much of the effort goes into organizing local committees and getting pasture established. In Berlin, it is the women, organized in women's clubs, who have been the most successful in HPI small livestock projects.

Altiplano Regions - HPI is targeting more of its aid to the altiplano and high valleys of the La Paz, Potosi, and Chuquisaca regions because of the severe economic problems of the regions coupled with the harsh environmental conditions. Many of the tin mines have closed in the last few years and there is considerable migration from the rural areas to Argentina to the cities and the colonization areas of the eastern tropics. By working with existing institutions, HPI is able to add a livestock component to their social programs providing an incentive for the campesino farmers to remain on their land.

Women's Promotion - Special courses and activities were planned to encourage women's participation in animal production. Given the importance of women in these activities HPI hired a woman agronomist to give special attention to this group. Her assignment is to lead special livestock courses for women, work in the poultry training activities, and assist in training courses for men in the communities.

New Animal Species - In 1986 the Bolivian program received a shipment of animals which included 6 Jersey bulls, 10 Katahdin rams and 8 male goats. These animals were brought in to reinforce original shipments of these species in 1982 and 1983. The Nubian goats have adapted well to the tropical climate, but some problems were demonstrated in the more humid areas. The Katahdin sheep have proved very promising since they adapt well to the hot weather, and are sought after by ranchers who immediately recognize their advantages.

Measuring project results in human terms is not an easy task. When project participants are asked how they have benefitted they mention owning an animal, which in normal times gives them the possibility of producing a larger herd and in a few years becomes a very significant source of income. During times of hardship these animals provide a form of "insurance" to the farmers and their families. The people often comment that the children in project areas are better fed. Many people have mentioned that the proceeds of the sale of a bull calf have allowed them to send the children to school or to get medical care in an emergency.

One dimension of the project that has been difficult to measure objectively is the increased capability in livestock production that comes about through training. In Bolivia, training has been held on using improved pastures and mineral mixtures, using pharmaceuticals and natural products to prevent or alleviate animal health problems, and selecting good breeding stock. In addition, some campesinos, selected by their community, have been trained at the village level to serve as para-veterinarians.

In a University thesis study done in the Yapacani colony, findings on the HPI project were as follows:

- o The project has improved the economy and family nutrition.
- o The project has improved the technical capabilities used in the management of dairy cattle, especially in relation to diseases of high incidence and easy treatment such as screw worms, mange, diarrhea, and parasites.
- o The introduction of dairy cattle has tended to change the farming systems from annual cropping to pastures and livestock.
- o The farmers who have cattle from the Heifer program do not have a greater number of animals but they have better animals and better pastures, which shows dramatically in the milk production: an average of 7.22 liters per day per cow from the Heifer participants, and 4.22 liters per day per cow from the non-participants.
- o There is a positive correlation between the health of the family and the amount of milk consumed.

The effects on target groups varies with the individuality and leadership of each group. In general the groups have been strengthened through the activity of carrying out the project. Where the project is recognized as having economic viability, the group has gained status, taken their responsibility seriously and taken initiative in planning, training, and other events.

The most direct effects of institution building for HPI Bolivia is in relation to the UNAPEGA group. UNAPEGA was founded in 1983 and an agreement was signed with Heifer Project. In this agreement HPI gives UNAPEGA the right and responsibility to administer the HPI animals under its direction until such time as the animals are no longer needed or are not administered adequately.

Without doubt the HPI animals have been used by UNAPEGA to obtain members, by making membership a requirement for receiving an animal. The member must then pay dues which amount to about \$US 6.00 per year until the Pass-On animal has been placed. The hope is that this process will give the organization a chance to prove itself useful, build an infrastructure and solidify its economic base.

In the Santa Cruz area, favorable contacts have been made between farmer groups and technical training entities such as FOMO, the Center for Tropical Agricultural Research, and the Veterinary School of the University. In the Chapare and Alto Beni areas similar contacts have been made with livestock agencies.

DOMINICAN REPUBLIC

In the Dominican Republic HPI has provided participants in 11 project holder groups with training, livestock and technical backstopping. HPI has also been instrumental in influencing government policy change, local institution building and the involvement of business, university and government representatives in issues affecting the rural small-holder farmer.

HPI's two regional staff have been supplemented by nine full-time volunteers and a growing panel of animal specialists who provide training and specialized technical support to animal technicians and extension workers who in turn train community leaders. The Dominican Republic Peace Corps office has provided a Peace Corps volunteer to work with HPI and the FEPROCA project. In addition, two work-study tours from the United States worked with the project participants in building corrals and storage buildings at the Boca Chica training facility. These groups were composed of about 20 volunteers each, who paid their own way.

Many of the projects were visited by a delegation of Arkansans who were members of LeadAr, a leadership development group. This privately funded group visited for the purpose of transferring ideas originating in developing countries to solving local problems.

Training

HPI is in the process of increasing the training component of the program. Over 1700 people were trained in animal husbandry and project management with short courses. In addition, many are trained informally through field days and visits by HPI staff and volunteers. Many project holders attended the two training conferences. At Boca Chica, the HPI Quarantine and Training Center trains local farmers with two-week hands-on sessions. The composition of participants is 40% men, 40% women and 20% children.

Two training conferences were held in the Dominican Republic. These meetings stressed project management skills, such as filling out reporting and financial forms and had hands-on livestock training events.

Project support in terms of livestock, equipment and veterinary supplies was provided. Project participants received at least 392 cattle, 303 pigs, 506 goats, 273 beehives, 36 rabbits, 2,974 chickens and 153 sheep.

One of the project holders, CAFESA, has evolved into a major technical resource. The farmer technicians from this project, after receiving extensive livestock training, then visit and train farmers and community leaders from other groups. This diffusion of training has been reciprocated by the Montecristi group who have shared their goat and cattle expertise with farmers in CAFESA.

In the Dominican Republic the nutritional benefits to the rural campesinos has been great. For some of the young children, the milk supplied by their HPI goat or cow was their first taste of milk. In addition to the immediate benefits of increased nutrition and income, HPI projects were responsible for outcomes such as increasing group membership and participation, providing means of support in the countryside, developing human resources and training women for a role in livestock management.

Women in HPI Projects

Women play an unusually large role in the HPI projects, participating alongside the men in organizational meetings, training sessions and actual livestock production. Some of the animal training of both men and women is led by female animal technicians. Lucy Marmolejas, the new Director of Terre Nova and former HPI-Dominican Republic staff is a woman.

Children in HPI Projects

HPI is also expressly recognizing the role of children in its programs. Because the children have traditionally been responsible for the care of animals and because the future rests with the children, rural children have been trained in new animal husbandry skills. The children have proved in some instances to be more receptive to innovation than their parents.

As an example, the promotion of rabbit raising as a protein source was not readily embraced by the Dominicans. The children, however, are very enthusiastic about raising rabbits after receiving school training in rabbit husbandry. One new project is the provision of training through the school in raising rabbits. HPI has provided the school with a small flock of rabbits. The offspring of the rabbits are then provided to those children who express an interest in raising rabbits and who attend additional training programs.

Problems Encountered

One of the problems that HPI has encountered in the Dominican Republic is the receipt of incomplete reports from some of the projects. Reports submitted by the small projects are good, but reports on projects held by the national development agencies are often inadequate. The HPI representative is working with these agencies to assist them in collecting project reports from the field so that the information can be consolidated and evaluated.

Institution Building and Policy Decisions

An important outgrowth of the HPI program in the Dominican Republic has been the formation of a new local institution, the Institutional Committee for Technology Transferring and Extension (CITTE). Composed of business, university, government and development leaders, CITTE meets monthly to discuss development strategies. After examining the strategies voiced by the groups currently working in the Dominican Republic CITTE will publish a development manual for use in the Dominican Republic and Haiti.

The HPI program has, both directly and indirectly, influenced policy decisions critical to the small farmer. Three groups composed of landless campesinos; CEVICOS, Montecristi, and FEPROCA, were able to prove their need for land to the government's Land Reform Institute. By demonstrating the campesinos' commitment to using the land for animal husbandry, and with a little urging from the HPI office, the campesinos acquired plots of land in a non-violent manner.

The Dominican Ministry of Agriculture developed a plan to subsidize dairy herd development by supporting dairy modules of large herds (around 500 head). The HPI Representative circulated a paper (Attachment 4G), examining the advantages and disadvantages of large herd development versus the efficiency of small-farmer herd development. After sending a copy of this paper to the Agricultural Attache, circulating it among the community and holding a round-table discussion, HPI received word that smaller 10-20 cow modules would be supported by the Ministry.

Ecological sustainability has always been a part of HPI's strategy for small-farmers. Over the last three years, it has become a more clearly articulated and integral part of HPI's training and conferences. The strategy of using less external inputs and more regenerative agriculture has had the effect of lowering purchases of imported feed concentrates and agri-chemical products.

Mid-Term Evaluation

The HPI/USAID Mid-Term Evaluation of projects which was conducted in 1987 included the HPI Dominican Republic projects. The Mid-term evaluation team found that most projects were performing well. The grass-roots farmers' organizations were generally better organized than the large social service institutions. HPI has addressed the recommendations of the evaluation team by: a) designating a colleague agency with a full-time employee as national coordinator of the country program b) defining the role of the national coordinator and c) providing project management training to project holders.

New Contractual Agreement

The HPI-Dominican Republic program has made substantial progress, but future opportunities exist. As of July 1, 1988, Terra Nova will be the contractual representative of HPI in the Dominican Republic. Terra Nova, which is an umbrella organization of HPI project holders, will have a broader base of programs and operations than HPI-Dominican Republic. It has additional funding from sources other than HPI and is organized and staffed by project holders. Because of this, Terra Nova is a positive step towards the self-sufficiency and sustainability of the work HPI has started in the Dominican Republic.

ECUADOR

Project Outputs

In Ecuador over 20 campesino communities in the Chimborazo region have initiated a sheep improvement program in cooperation with HPI, the Peace Corps, and the National Sheep Association of Ecuador. With HPI funds over 154 families each have received Corriedale sheep and appropriate training in the care and management of sheep. The main production objectives are to increase both the quality and quantity of wool produced by their small criolla flocks of sheep through crossbreeding as well as providing more meat for their families. The communities have recently formed a cooperative to market their wool directly to weavers which has increased their income by 40%.

In the Pastaza Livestock Project the Quechua Indians of the Amazon area are learning alternatives to their previous semi-nomadic lifestyle. The influx of colonists and oil companies into the area has depleted the game supply and poisoned the fish, reducing the Indians' food supply.

By September of 1988, a total of 251 chickens, 12 hairsheep, 9 bulls, and 36 heifers will have been distributed to families in eight communities. Fourteen members of this project have attended one week animal husbandry training courses.

The Shuar Association Cattle Project is made up of Shuar families in the Amazon region who experience problems similar to the Quechua Indians, mentioned above. Participants in this project have been furnished with 17 heifers, 3 bulls and 20 pigs through 1987.

Effects on Target Groups

The distribution of the animals is providing a source of nutrition to supplement the loss from hunting and fishing. The groups are beginning to develop leadership within the community to help plan, develop and organize their resources, while protecting their environment. Because the participants have had little or no contact outside of their area, the training provides them with external experience, as well as technical knowledge.

Problems encountered

The major problems experienced in Ecuador have been due to the remoteness of the areas. Because the projects are in jungle areas, some project areas are accessible only by small airplanes. This has made communication and training very difficult. The best strategy has been to train community leaders who pass on their knowledge to the rest of the community.

Training by local institutions

Fourteen project participants were trained in a one-week seminar at the 4-H ranch, Rancho Ronald. A Peace Corps volunteer is the project organizer for the Chimborazo Sheep project. She reports that the training sessions are attended by 75% of the community (10 to 12 families with 10 members each). The rest of the community remain behind to do the necessary work. Men, women, and children gather to learn about animal husbandry techniques and ways to market wool in a family gathering type situation with the entire family participating.

Unintended effects

One effect of the project, as mentioned above, is the exposure of project participants to people and places outside of their own community.

In fragile ecosystems, such as the Amazon jungle, it is important that the environmental impact of a livestock project be carefully considered. The HPI project is bringing about dialogue concerning these issues. The Representative from the HPI Ecuador program has attended symposiums on The Environmental Impact of Livestock Production in the Humid Tropics held in Bolivia and Peru. He also attended a HPI Bolivian Symposium on sheep and alpaca raising in the highlands where great emphasis was placed on sustainable grazing practices in the fragile ecosystems above 10,000 feet.

THAILAND

Specific Outputs

HPI works in northern Thailand through the Karen and Lahu Baptist Conventions and the Akha Advisory Committee. Beginning in 1985 and projected through 1988, these projects have distributed over 481 cattle to 478 participant families; 103 buffalo to 99 families; 36 goats to 35 families; and 64 ducks, 6 swine, and 3,840 fish fingerlings to tribal demonstration/training centers. Some 42 cattle and 7 buffalo have been passed on to 42 families and at least 4,600 fish fingerlings have been passed on to establish 10 new family ponds.

Through the Thailand Karen Baptist Convention, HPI works with 26 village groups on a loan system. Twenty-three of these groups have begun repaying their original loans.

An aquaculture specialist funded by HPI is currently in his second year of work with the Karen aquaculture project. He is assisting the project in implementing stocking and management trials for fish production.

This project takes advantage of agriculturally regenerative methods. Livestock are housed in huts above the ponds. The manure drops into the water where it stimulates the growth of aquatic vegetation, which is consumed by the fish. While harvesting the fish, the nutrient-rich water is drained from the pond to the fields below, for use as fertilizer.

Training is an important component of these projects. Reports indicate that at least 869 tribal farmers have received over 179 hours of training from 1985 - 1987. It is impossible to measure how many more farmers received on-site instruction through the visitation of HPI-provided consultants over these years.

Effects

Many of the tribal people of northern Thailand had become addicted to opium and due to their addiction, sold what little land they had to buy opium. The Karens have organized tribal groups which became involved in the HPI-supported programs in northern Thailand. Through their involvement these people have been able to become productive once again and rid themselves of their addiction.

Due to visits of a husband/wife veterinary team (Drs. Herman and Sylvia Salk) sponsored by HPI in 1985-1986, many tribal groups have been made aware of the importance of vaccinating their animals. Most of these tribal groups had never vaccinated their animals and the loss of animals to disease was common. Now the tribal people know where to purchase vaccines and how to administer them. Mortality rates in buffalo, swine and poultry have dropped precipitously.

Due to government reforestation policies and land shortages, many tribal groups were losing their land. Through HPI buffalo and cattle projects, the tribal farmers have cultivated the land, proving that they can make productive use of it. Since this is the criterion used by the government in claiming the land, the tribal farmers are allowed to keep it.

Goats have allowed many tribal groups living in hilly and marginal land, to produce meat for home consumption and for sale. Income received by these groups from sale of meat or sale of crops grown in their buffalo-plowed fields, has allowed many of their children to attend public schools. Before these projects, many of the children were unable to attend school as the families had insufficient funds.

Many of the various tribal groups, as a result of these projects, are working together in animal health programs and training workshops.

Problems

The two tribal goat projects were placed on hold in 1987 due to internal problems within the cooperatives. HPI support was thus postponed during 1987. These groups have agreed to repay the initial project loans so that other cooperatives can be established in 1988 and 1989.

Problems with livestock deaths due to easily recognizable and preventable diseases was recognized by the husband/wife veterinary team sent by HPI. They worked with several communities and taught village leaders how and why to obtain and administer vaccines.

The aquaculture project experienced problems with the technique of housing ducks over the ponds. The droppings from these ducks, and other animals, was used to fertilize the ponds. However, many ducks fell prey to dog attacks and a problem with low egg production was also noted. Subsequently, the group obtained two geese to protect the pond area and other groups have switched to housing rabbits and swine over the ponds.

Impact

Women's and youth groups were encouraged to visit the Karen aquaculture demonstration ponds. The women participated in fish harvesting activities and are working towards forming their own aquaculture group.

These tribal groups, especially the Akha, have practiced slash-and-burn cultivation practices for many years. Government policy and population pressure have forced them to become more sedentary. The HPI programs have taught these groups ways to survive in a time when many of their traditional practices have been denied them.

These projects have become models of successful agriculture development for local government offices.

Unintended results

The projects were initially separate entities. Many of these tribal groups had never had contact with other tribes, much less cooperated with one another in development projects. However, as the tribal groups recognized their common problems and were trained together, they have become much more cooperative in their efforts.

Project status

The projects are progressing well and no significant changes have been made or are anticipated in the overall northern Thailand program. With the exception of the Lahu Goat project, all groups are meeting or surpassing their original project objectives. Reestablishment of the goat project will take place in 1988 with a new Karen goat/dairy cattle project.

INDONESIA

Specific Outputs

HPI-supported projects in Indonesia from 1985 through 1988 include the PUSPETA Livestock Research, Demonstration & Training Project and the FCC-Luwu Integrated Aquaculture and Poultry Project, both supported by the National Cooperative Business Association, NCBA (formerly CLUSA), and the Intensification and Improvement of Livestock Production Project, through Bina Swadaya.

From 1985 and projected through 1988 these projects have distributed some 5,986 chickens, 452,276 fish fingerlings, 131 goats, 1,100 quail, 367,876 shrimp, 71 sheep, 6 swine, 189 cattle and buffalo, and 50 ducks. These animals have been used in demonstration centers for use in training rural farmers and have been distributed to local farmers through credit packages.

Over 1,100 rural farmers have participated through the project demonstration/training centers in lecture courses and hands-on practical experience. Areas of training have included goat breeding, cattle raising, disease control, feed preparation, herd management, cooperative management, farm and crop management, soil conservation, chicken raising, disease testing and prevention, and problem solving. Two veterinary consultants and two aquaculture specialists from the International Center for Aquaculture at Auburn University have provided technical training to project groups.

A Progress Review of project activities conducted through Bina Swadaya was completed in 1987. An evaluation of NCBA-supported projects, PUSPETA and FCC-Luwu, is scheduled for 1988/89.

According to Bina Swadaya's mid-project evaluation, a total of 29 participants in 4 village groups received poultry credit packages (580 chickens); 85 participants in 7 village groups received cattle and buffalo credit packages (78 cattle/ 7 buffalo); and 15 participants in 2 village groups received goat packages (71 goats). Almost half of the chicken and goat participants have repaid their credit packages as have one third of the cattle and buffalo participants.

Effects

As a direct result of training through the PUSPETA Jatinom Training Center supported by HPI, dairy cattle farmers have increased their milk production and in cases, have decreased calf mortality.

The effects of the projects in Indonesia have not been limited to project participants. Other local groups and individual farmers have implemented some of the improved management and production practices they have witnessed through visits to the project centers and through observing farmers who have been involved as participants. The programs have received attention from local media and government officials.

Problems

The livestock mortality rate was high in chickens and there was a problem with diseases in young calves for the projects. Networking with animal husbandry staff and teaching farmers to vaccinate their animals has brought the problem under control. HPI sent two veterinary consultants who assisted in training the project veterinarians and helped develop an animal health extension program.

The veterinary consultants also assisted PUSPETA veterinarians in dairy cattle surgery and heat detection. Problems with breeding were improved as local veterinarians learned to better assess when a cow was in heat, and therefore ready to be bred.

A forage planting campaign among participants has helped alleviate feed problems experienced during the dry season. Farmers were trained in growing, harvesting and storing appropriate feed grasses and were taught ways in which to utilize this fodder in the dry season.

Impact

An important aspect of the overall HPI programs in Indonesia has been the education of local village level farmer groups through which HPI local partner agencies work. Interested groups are encouraged to participate in training sessions concerning cooperative management. Each group elects officers and is responsible for their own participant selection and record-keeping.

Unintended results

Aquaculture participants have been given local bank loans based on the use of HPI-supported aquaculture systems developed at project demonstration/training centers. Other farmers interested in using the same systems have been offered the same loans, provided they also receive training at the project centers. Individual bank credit had never been issued before due to the high risk and low level production technology heretofore demonstrated in Indonesia.

Project Aims

The overall aims of the Indonesia program have not changed. The focus of various components of each project has narrowed and shifted as a consequence of program results. As a result of discussions with local aquaculture participants, it has been proposed that a full-time expatriate specialist be hired.

Results obtained from the aquaculture, poultry, cattle, and hybrid corn programs indicate an extremely high capability for increasing the living standards of participating families. Successful aquaculture methods, tested in production trials at the aquaculture centers, will be taught to local groups. More emphasis will be placed on training farmers and distributing feed due to the influx of farmers who want to participate in HPI projects.

KENYA

In Kenya, HPI is working with 7 project groups comprised of Small-Holder farmers. They are being trained to use the "zero-grazing" method of raising dairy cattle. This is a method that HPI is popularizing in several countries in Africa. In zero-grazing, the cattle are kept in a pen, while the grass and fodder is collected and brought to the cattle. This method has the advantage of limiting the animal's exposure to parasites, ticks, and diseases borne by other animals. It also allays the need for fencing, and allows collection of the manure for use as fertilizer. Since the animals are confined, their sharp hooves do not damage the fields of forrage.

This method is rapidly spreading to the neighboring farms, even those with no HPI involvement. In this Matching Grant period, 221 heifers were distributed to an equal number of families. Of these, 72 were passed on by project members.

A new camel project has been initiated to replace the one sponsored by Technoserve which was shelved because import permits were refused by the Government. Somali camels will be transported from Northern Kenya to the Maasai project. Because of the potential of this experimental project, it will be watched with interest, not only by HPI but also by the Kenyan Government

A HPI Representative, working out of Technoserve, supervises the projects from Nairobi.

Training

The zero grazing method is a big change for the farmers who have traditionally let their cattle roam freely. The training provided by HPI, therefore, covers new subjects such as building of the zero grazing units, planting sufficient forrage to be prepared for the dry season, tick and disease control, and detection of breeding readiness.

During the Matching Grant period, 44,784 people days of training were given in 36 training sessions. Numerous on-site visits to the farms, along with practical demonstrations, were also made by extensionists and by project managers. Excellent support from the Ministry of Agriculture and well-trained extension workers give Kenyan projects a head start over those of most other African countries.

HPI plans to strengthen its training system in the future to include national conferences involving all the projects. The use of texts and visual aids specifically developed for the regions are also envisioned.

Effect on Target Groups

Women play an important part in several of the Kenyan projects, holding positions at management level. The Pusu Women's Project is an exceptionally successful group whose success with zero grazing has greatly influenced their community. With this success also comes more prestige, as neighbors see that these people's well nourished children are now able to go to school and that improvements are being made on their dwellings.

One project built a mala (cultured) milk plant and is now able to sell its milk at a price 1/3 higher than before.

The Nakuru Laymen Project started in 1982. Its first two years were marked by poor management and drought, a 62% mortality rate among animals and near collapse. By 1986, with new management in place for two years, the project was doing so well that it was able to get funding from other sources. HPI ended support in order to go on to more needy projects.

Problems

Overall, the Kenya projects have been relatively trouble free. Some project members have had difficulty getting sufficient funds together to build the zero grazing units. One project has had infertility problems due possibly to a copper deficiency. HPI is in the process of researching the copper problem.

Impact on Community

HPI's influence is felt mainly on the project level. In and around the project areas local farmers, seeing the dramatic increase in milk yield and lowered mortality rate of project animals, are selling their local cattle to purchase improved animals and also building zero grazing units on their own. These communities are seeing increased employment and an expansion of the local dairy industry.

Comparison of Accomplishments

HPI's plans to diversify its program in Kenya with goats, sheep and swine did not materialize due mainly to the lack of good tendered proposals involving animals other than cattle. A restocking project among the Maasai not utilizing USAID funds, did include the distribution of 1500 local goats. Changes in the Kenya price structure has made swine production much less attractive to the small-holder. The Kenya program reached its goals in all other areas.

UGANDA

HPI sponsors five ongoing zero-grazing dairy cattle projects in Uganda. One project also distributes pigs. The projects are managed by the Church of Uganda (COU). A HPI representative and an assistant located at the COU office oversee the program.

The Ugandan Government has as a priority the rehabilitation of the dairy industry that suffered severely under Idi Amin's regime. HPI has an excellent relationship with the current Ugandan Government.

A total of 509 dairy cattle and 78 pigs have been distributed to an equal number of families. Of these 56 are pass on animals, some of them second and third generation. Since the start of the Matching Grant, 21,343 people days of training were given in 60 training sessions. Along with the more formal training, extension workers and project officers visited the farmers regularly.

A one-day country-wide conference for all the projects was held in 1988. It was attended by prospective project groups, as well as those already working with HPI. It covered such subjects as HPI development philosophy, project reporting requirements, project development, and solving problems common to the projects.

Effect on Groups

The substantial increase in milk production of the improved cattle distributed by HPI (8-14 litres a day) has enabled the project farmers not only to keep ahead of the rampant inflation in Uganda, but also to increase their effective income through the sale of milk by 200-300%

The participants' health has greatly improved due to the increased protein intake. The manure collected is used to improve production of vegetables and bananas, again improving the diet. Funds are often used by the families for the children's education.

Two of the projects are predominantly oriented toward women with children, most of whom lost their husbands in the ongoing civil strife which has devastated parts of the country.

A mid-project evaluation of the YWCA Project by an independent consultant was completed.

Problems

The Tororo story is typical of the effects of the civil war. The Project was started in 1986. In the first year all targets were met or exceeded. All 120 participants had received the training necessary to receive a heifer, even though only 47 families were destined to receive an animal that year. Plans were made for an aggressive expansion program. But civil war moved into the area in mid 1987. Most of the 67 farmers with animals by that date were forced to flee; 33 animals were "looted"; the animal husbandry officer employed by the project was killed. At the time of writing, it is still unwise to venture into the Tororo area.

Aside from the problems caused by the civil unrest, most of the projects are still having difficulties with disease control, partially due to interrupted training and scarcity of drugs. Other problems involve the high cost of supplementary feed and inefficient artificial insemination (A.I.) services.

The COU encourages increased training and allows the farmers to buy feed and drugs from its stores in an effort to combat these problems. Distribution of breeding bulls to supplement the often inadequate A.I. service is also being effected.

Impact on Community

The average HPI farmer's income is 4-5 times the average salary of a government worker. Farming groups all over Uganda, having witnessed the success of HPI's zero-grazing system, have sent in requests for project funding.

The Uganda Government has recognized the potential of the Small-Holder Dairy Development strategy, the zero grazing system, and the reasoning behind the importation of good dairy animals for the small holder. Previously they had considered this a risky proposition and had only dealt with wealthy farmers. They are now considering a "White Belt" around Kampala consisting of small dairy farmers who will supply the city with milk products.

Comparison of Accomplishments

The civil war has obviously held back several projects, as mentioned earlier. Progress was also slowed by ongoing difficulties in obtaining good breeding cattle. The last shipment of 100 dairy cattle was imported from Germany at considerably above previously budgeted costs.

During the Matching Grant years, the Uganda program matured. Communication and reporting procedures have been greatly improved. The projects' management teams are well trained in HPI development philosophy and are ready for expansion.

ZIMBABWE

HPI is in the initial stages of developing the Zimbabwe program. A contract for Representation was signed with Christian Care in late 1986.

The goal of three of the four HPI projects in Zimbabwe is to aid widows, youths and families who have been resettled, after having lost everything during Zimbabwe's War of Independence which ended in the early 1980's. These villagers are in need of cattle, both as draft animals and for the nutritive value of the milk. Malnutrition has been a severe problem among these resettled people.

Cattle have also been distributed to two youth training centers to be used as demonstration animals. Pass-ons are to these youths and to the local villagers who are also part of the projects. A total of 104 cattle have been distributed to two of these projects. The farmers in the Zvataifarira Project are still in the training stage and no cattle have as yet been distributed to the project participants.

The farmers of the Manyika Project have received 11 heifers and 98 pigs, of which 55 are pass-on animals. Each family received one animal. These quality animals upgrade the local herds, strengthen the local training center by allowing it to have the availability of demonstration animals, and improve the dairy and swine production of the farmers through crossbreeding of the improved stock with local animals.

A total of 4,068 people days of training were given to the Zimbabwe HPI project farmers.

Effect on Groups

Much of the Matching Grant period in Zimbabwe was marked by the worst drought in 30 years. It wasn't until 1988 that rains came. The people, therefore, as well as the animals, suffered greatly from lack of food and water. The mortality rate of the Zimbabwe project animals was 25%. This however was a lower rate than that of neighboring farmers, showing evidence that HPI's training in animal health was effective.

The project members learned how to work together as a team and to share during these hard times. Now that the drought is over, they are looking forward to putting their knowledge to work toward productive initiatives.

Problems

The problems were related directly to: a) the drought, b) the relative newness of the project participants to HPI-style animal husbandry, and c) to the HPI Representative's need for additional training.

Impact on Local Institutions

As the drought persisted, the local extension service recognized increasingly the strong points of the HPI system, and aided the HPI farmers more and more through special training sessions, workshops and on-site visits to the farms. A feeling of cooperation was felt between the extension workers and project people that have not been there before.

The projects' management currently have long lists of farmers from surrounding communities waiting to become HPI project members.

Comparison of Accomplishments

The HPI program in Zimbabwe did not progress as quickly as desired. This was due greatly to the drought, but also to HPI's tight financial position which forced projects to hold back in their activities, and to the newness of the HPI Representative to HPI's development philosophy and procedures.

However, a positive USAID/HPI Mid-Term Evaluation was completed of the Zimbabwe program in July, 1987. The evaluation team was impressed with the program, even as it recognized certain difficulties. The donated animals were considered appropriate to the environment and to the people; technical assistance was considered average to above average; the staff was judged knowledgeable and the training good, although follow up training needed strengthening. Several of the recommendations in the evaluation have been implemented, such as help by the HPI Representative to speed up communications and a more systematic approach to reporting. Further improvements are planned for the immediate future.

ZAMBIA

HPI is working with five (5) projects in Zambia, three (3) of which were started during the last year of the Matching Grant. A new contract agreement for HPI representation was signed in 1987 with the Christian Council of Zambia.

Three of the HPI projects focus on the introduction of oxen for draft animal power to Zambian communities. These villages had been relying on tractor power as prescribed by earlier government policy. Though tractors are both unreliable and costly, draft animals power was not being used in most of the villages.

This HPI program is acting as a model for many communities now interested in the use of draft animal power. The villagers have adapted extremely well to this new method of land cultivation. They have witnessed the oxen's capacity for a heavy work load and their reliability. Projects aimed at training youths are now also training adults, because of the high level of interest expressed. Ongoing training is being provided to 485 youths and 425 adults who attend monthly training sessions. A total of 86 oxen and 75 heifers have been distributed to these groups.

In Zambia there is a problem with very high unemployment – especially among youths who have dropped out of school due to lack of funds or space in schools. The goal of the Twafwane Oxen Project is to train groups of these youths in animal husbandry. Upon their graduation, each group is provided a pair of oxen to be used collectively as draft animals.

The Malcolm Moffat Project, the first of its kind in the region, supplied 46 goats to a teachers college to be used in practical animal care training for the students and to cross with the local farmers' animals. Pass-on animals from the school's herd are distributed to the local farmers. These goats and their cross-bred progeny will improve the meat and milk production of the community.

Problems

One small oxen project which was started in 1987 was forced to be contented with sheep and goats in their first year when the nearby government ranch was closed without warning, and quality oxen were not available elsewhere. The HPI Representative borrowed a truck in 1988 to take some of the project participants 700 kilometers away to buy their oxen.

The presence of trypanosomiasis, which is spread by the tsetse fly, has been difficult to control and has caused several deaths amongst project animals in affected areas.

Impact on Community

HPI was instrumental in organizing a three-day national conference on oxenization which was attended by HPI representatives, the HPI project participants, the Kasasi Agricultural Training Center, (which HPI has supported in the past), the University of Zambia Engineering Department, and other interested parties.

The Zambian Government has made their oxenization program a priority. HPI's program, therefore, fits well with Government goals. HPI projects are in regions where the Government program has not yet been implemented. These farmers had never been exposed to draft power cultivation. Their success has influenced surrounding communities who in turn are switching to using oxen for cultivation.

Comparison of Accomplishments

The Zambian Oxenization program, which is HPI's major emphasis in this country, is right on schedule. The easy acceptance and adaptation by the villagers of this new method of cultivation has been a pleasant realization.

V. MANAGEMENT: REVIEW AND ANALYSIS OF HEADQUARTERS/ SUPPORT FUNCTION

A. Project Planning and Management Activities

Project planning originates with the project holders. A proposal from the field passes first through regional or country representatives for initial assessment and revision. Promising proposals are then forwarded to the International Headquarters office, where they are presented to a committee composed of the Global Service Directors of HPI. After the initial screening, any revisions are sent back to the project holders for approval. The mutually agreed upon project then competes with other projects for the available funding.

Throughout the grant period the project screening process has been evolving. In 1986 and 1987 the HPI Board of Directors approved each project individually, a process which is now done by the HPI staff of Global Service Directors, using HPI policy guidelines.

B. Staff Resources

The management and implementation of the Matching Grant program has been shared between HPI's Headquarters Global Services Staff and HPI representatives and contract representatives in the field. Financial and reporting support were provided by the Department of Budgets and Grants, which consists of a director and an administrative assistant. HPI's finance department played a role in the management and disbursement of MG funds.

Technical resources were provided by Program Directors: for Africa, James DeVries, PhD.; for Asia, Robert Pelant, D.V.M.; and for Latin America, James Hoey. Since early 1988, the directors were each aided by an administrative assistant and the department shared two secretaries. This growth in staff reflects the increase in project monitoring and administration which became necessary with the increased number of projects. The country level program management is provided by field staff and in-country organizations.

HPI also makes use of many volunteers, both at the Headquarters and in the field. In the Dominican Republic, a network of highly trained volunteers give animal husbandry training to project holders. Volunteers from the U.S. have paid their own way to participate in work-study tours in the Dominican Republic. These volunteers have worked side-by-side with the Dominicans at the Boca Chica training center, building corrals, storage sheds for fodder, and latrines.

C. Training (staff and beneficiary)

The technical and management training provided to project participants, project organizers, technicians, and field staff is a major element of the HPI program and has been addressed earlier in this report. Field staff training events have been held following HPI conferences. Regional staff meetings have been held in India, Guatemala, Peru, Bolivia, Indonesia, Thailand, Tanzania and the Dominican Republic.

Many of the project organizers, who have been included in these training events, are women. Until 1988 information collected on training was not gender specific. Because of this, HPI has revised its forms to report training by gender. HPI is also targeting its program to encourage more women's participation in training.

D. Logistical Support

Shipments were coordinated through the staff at HPI's nine U.S. regional offices and through the International Learning and Livestock Center in Perryville, Arkansas.

E. Technical Assistance

Technical Assistance, another major element of the HPI program, is provided to the project-holders through field staff, in-country agencies, government extension workers, veterinarians, consultants and volunteers. Often the provision of technical assistance is a multi-level process. A local project organizer provides the first level of assistance. The next level is provided by a technician or extension agent who serves a number of communities. This technician may receive backstopping from the HPI representative, an animal husbandry professional (volunteer), consultant, or experts from other agencies. When technical information is required, HPI provides information from its technical files or library. Further information is available through relationships with Volunteers in Technical Assistance (VITA), Winrock International, and the Water Harvesting/Aquaculture Project (WH/AP).

F. Project Fund-Raising and Marketing

From 1980 through 1988, HPI experienced a steady growth rate in gift funds. The average growth rate has been around 12%. Support comes from church groups, individuals, corporations, foundations and USAID grants.

Many of the HPI programs assisted by this grant have additional grant funding from other associations and organization. The Dominican Republic program has received funding from the Food Industry Crusade Against Hunger, Food for All, and the Stratford Foundation. In the Bolivia program, an office and a full-time staff person are provided by the United Methodist Church, and the Ecuador program receives funding from Lutheran World Relief.

The Manyika Project in Zimbabwe is partially funded by the William Penn Foundation and projects in Zambia receives funds from the Catlos Foundation.

G. Board Participation

The HPI Board of Directors is not directly involved in actual project selection or management. However the Board does approve program budget, assists in fund-raising efforts, sometimes travels on behalf of HPI, and makes organizational policy decisions. The Board receives semi-annual reports from the HPI Global Services staff on project progress.

H. Development Education

HPI, a recipient of a Biden-Pell Grant for Development Education (FY 1986-FY1988), has a three member Department of Development Education involved in educating US children in the root causes of hunger and poverty. A curriculum is being developed for school children (K-12) which examines poverty in developing nations through a series of activities and readings. Many teachers have attended developing education training sessions at HPI's International Learning and Livestock Center in Perryville, Arkansas.

VI. FINANCIAL REPORT

1. See Annex A1, A2, and B on next page.

2. Proposed budget and actual expenditures

Over the three year matching grant period an estimated total of \$3,653,610 will have been spent. Of this amount, \$1,315,000 was provided by USAID and the remaining \$2,338,610 will be matched by HPI. This matching amount represents \$938,610 beyond the \$1,400,000 match required of HPI. These additional HPI provided funds were used to expand project activities which grew faster than originally proposed.

The budget line items which required more funding than originally proposed were: Project Support, Technical Materials, Evaluation and Indirect Costs. The Project Support line item was increased by \$53,271 due to the inclusion of more training events and conferences than were budgeted. Regional spending in Africa and Latin America was over the budgeted amount by \$690,305, due to increased project growth and the funding of more proposals.

Due to the high demand for training materials and and The Exchange newsletter, the Technical Materials line item increased by \$6,749. The inclusion of a final evaluation, to be done in October of 1988, has increased the Evaluation budget by \$13,800. With the increase in grant spending, the indirect cost budget has, of course, also increased.

3. Status and timing of letter-of-credit drawdowns

All drawdowns were done on a reimbursement basis. The rate of drawdowns was generally consistent. In July of 1988 the final drawdown of \$31,597.88 was made, leaving a zero balance of the USAID funds. The remainder of project expenses will be borne by HPI.

PVO FINAL REPORT

FINANCIAL PROFILE OF THE PROJECT

A. Budgeted Versus Actual Expenditures for FY's 85, 86, 87

Project Elements	FY '85		FY '86		FY '87	
	Budget	Actual	Budget	Actual	Budget	Actual
Consultants	5,000	2,728	5,000	4,905	5,000	5,000
Technical Materials	8,000	10,718	8,813	9,031	7,187	11,000
Evaluation	6,000	6,006	6,000	14,379	21,000	26,414
Project Support	9,000	42,709	9,000	25,696	9,000	11,866
Livestock Institute	6,000	5,465	6,000	1,297	6,000	6,011
Latin Am/Caribbean Proj	259,000	279,737	269,173	378,864	248,827	475,962
Africa Projects	235,000	227,912	224,014	288,334	245,986	521,496
Asia Projects	204,000	204,524	204,000	184,766	204,000	225,595
Indirect Costs	<u>168,000</u>	<u>179,353</u>	<u>168,000</u>	<u>208,673</u>	<u>168,000</u>	<u>295,169</u>
TOTAL	900,000	959,152	900,000	1,115,945	915,000	1,578,513

B. Sources of Project Funds

AID Matching	479,230	522,534	313,239
Private (Cash)	479,922	533,411	1,185,274
Stratford Foundation		60,000	
FICA			50,000
Food for All			5,000
Catlos Foundation			<u>25,000</u>
TOTAL	959,152	1,115,945	1,578,513

PVO ANNUAL REPORT GUIDELINES

FINANCIAL PROFILE OF THE PROJECT

A. Budgeted Versus Actual Expenditures

<u>Project Elements</u>	<u>Budgeted</u>	<u>Actual</u>	<u>Variance</u>
Consultants	15,000	12,633	- 2,367
Technical Material	24,000	30,749	+ 6,749
Evaluation	33,000	46,799	+ 13,799
Project Support	27,000	80,271	+ 53,271
Livestock Institute	18,000	12,773	- 5,227
Latin Am/Caribbean Proj	777,000	1,134,563	+357,563
Africa Projects	705,000	1,037,742	+332,742
Asia Projects	612,000	614,885	+ 2,885
Indirect Costs	<u>504,000</u>	<u>683,195</u>	<u>+179,195</u>
TOTAL	2,715,000	3,653,610	+938,610

B. Sources of Project Funds

AID Matching Grant	1,315,003
Private (Cash)	2,198,607
Stratford Foundation	60,000
FICA	50,000
Food for All	5,000
Catlos Foundation	<u>25,000</u>
TOTAL	3,653,610

PVO ANNUAL REPORT GUIDELINES

FINANCIAL PROFILE OF HEIFER PROJECT INTERNATIONAL

A. EXPENDITURES

	1985	1986	1987	1988
Management/Fundraising	\$ 1,360,960	\$ 2,002,800	\$ 2,277,635	\$ 2,373,000
Program Management	500,660	455,290	612,574	505,000
Project Grants	3,395,957	3,604,821	4,482,095	3,453,000
Development Education	177,640	233,017	1,096,856	1,301,000
Program Services	<u>637,828</u>	<u>717,956</u>	<u>549,349</u>	<u>733,000</u>
TOTAL	\$ 6,073,045	\$ 7,013,884	\$ 9,018,509 ¹	\$ 8,365,000 ²

B. SOURCES OF FUNDS

Private Contributions	\$ 5,236,572	\$ 6,056,930	\$ 6,457,378	\$ 7,653,226
Donations in Kind	300,773	363,891	312,356	408,000
Generated Revenue	566,718	239,114	421,854	592,000
AID Grants				
Ethiopia OPG		125,000	415,000	
Haiti OPG		3,010		
Cameroon OPG	222,173	33,910		
Matching Grant I & II	362,342	319,647	532,519	246,774
Biden Pell			54,392	45,000
Ocean Freight Reimb.	155,438	190,696	198,859	100,000
Foundation Grants			110,000	155,000
Stratford			91,000	
FICAH				50,000
Chatlos				25,000
Food for Hunger				<u>5,000</u>
TOTAL	\$ 6,844,016	\$ 7,332,198	\$ 8,593,358 ¹	\$ 9,280,000 ²

¹Preliminary figures based on final audit

²Projected income and expenditures

4. Fund-raising plans and activities

Throughout the Matching Grant period, HPI has experienced a steady growth rate in gift funds of approximately 12%. HPI has been able to provide a larger match for program support than originally proposed. These funds were raised through churches and organizations, Christmas donations, direct mail appeals and grants for specific projects.

5. Discussion of PVO cost-share

As mentioned in number 2 above, HPI will have matched USAID funds of \$1,315,000 with \$2,338,610. This is an increase of \$938,610 over the proposed \$1,400,000. HPI was able to raise these funds through its normal channels. The funds were used to expand the training component of HPI's program with additional conferences and meetings, to produce and distribute additional Exchange newsletters and to fund the growing level of project proposals stemming from the newly strengthened country programs.

VII. LESSONS LEARNED

1. Estimates of Project Costs and Benefits

The project costs of HPI projects depend upon the stage of the "Passing on the Gift" program. As more animals are passed on, the cost per family becomes lower. A cost-benefit analysis, therefore, must be conducted over many years to get a true picture of the actual costs.

Presently HPI requires that groups continue to report to HPI for two to five years after HPI funding ceases. Further information however is necessary to make an accurate cost-benefit analysis of the impact of HPI programs in both the years under the grant and future years. Some cost-benefit analyses were conducted at the close of the first Matching Grant. More cost/benefit analysis studies are being planned in the future and will become more cost-efficient with the new data-base in effect.

2. Institution Building Assesment

HPI's focus on the participatory development process has been successful in forming and supplementing project holder institutions. One example of successful institution building is the growth of the PUSPETA Cooperative in Indonesia. PUSPETA has developed a milk marketing structure and is providing livestock feed for its members. The success of PUSPETA has resulted in an unusual action by the Indonesian Government. In 1988, the Director General of Cooperatives of Indonesia gave PUSPETA recognized cooperative status.

In general, a successful HPI project puts the local group in a better position to attract support from other sources. One in particular is Farming Systems Kenya, initially funded by HPI, now with subsequent funding from Lutheran World Relief and the African Development Foundation. This project no longer needs HPI support, nor does the FCC-Luwu Project in Indonesia. In Uganda, HPI's contract agency, the Church of Uganda, which has received local currency grants from USAID, has a promise of support by the World Food Program and has been supplied with seconded extension workers from the Ugandan government.

3. Estimate of Sustainability

One of the biggest factors in sustainability is the growth and development of institutions. As mentioned above, many of the HPI project holders have been able to secure alternative funding for their ongoing programs. Many institutions have expanded their program scope by the provision of marketing services, feed, animal technicians, credit unions, and other services through a cooperative arrangement. The continued need for these services provides a basis for the continuation for these groups, many of which were assembled simply for the organization of the HPI project.

Training and education are vital tools in making livestock projects sustainable. HPI is focusing on the goal of providing substantial training to all project participants, emphasizing women and youth.

Another important factor in making projects sustainable is the passage of government policy which is favorable to the small-farmer. In China, the impact of favorable small-holder policies can be seen in the amazing increase in grass-roots livestock development. The government of Zimbabwe has funded livestock projects in geographic areas in which HPI has pioneered and developed programs. In Uganda the government has based its dairy development plan on supporting the small farmers. Government support and favorable policy create an economic climate which increases the sustainability of projects.

HPI's Pass-on element is a unique way in which the initial input provides continuing resources to the community. It is by the pass-on that the original input is passed on from farmer to farmer providing project sustainability in the community.

4. Benefit Distribution

Because of its grassroots approach, HPI has little difficulty in assuring that its assistance reaches its target audience -- the very poor. Generally, HPI projects benefit entire families, men, women and children.

A number of HPI's projects involve women's groups, with the balance of other projects composed equitably of women and men. In Africa HPI has found it easy to reach women due to the great amount of interest by women and the available opportunities to develop programs. Little cultural resistance to providing livestock to women has been encountered. The same is true of Asia. HPI is attempting to tailor many programs to the specific needs of women in each of the regions. In Latin America women's projects earn the respect and cooperation of the men when the economic benefits to the entire family are realized.

5. Local Participation

HPI does not design, initiate or implement local level projects on its own -- the projects must be initiated and run by the local community. Participants are expected to invest time, labor, funds and/or material resources into the project. The farmers are involved in the project administration and reporting as well as training and livestock distribution.

Some of the events require special efforts in order to encourage female participation. HPI experience has found that women are not as likely to participate in long-term training events or events which require travel. Because of this, more on-farm training events, which encourage women's participation will be sponsored in the future as well as arranging travel and care for children at other events.

6. Leadership Development

In recognizing that leadership is a critical component of project sustainability; HPI has taken steps to upgrade the leadership training of project participants. At the project level three types of training are provided: technical, managerial and leadership. Leadership training is undertaken in three ways:

- a) project leaders receive training directly from HPI.
- b) project leaders receive training from other development groups (such as Partners for Progress in Kenya).
- c) project leaders learn from each other in regional conferences and workshops.

Some of HPI's leadership development activities include the Conference on Animal Production and Leadership in the Dominican Republic (1987), the Annual Institute on Livestock in Development (1985-1988) and the "Partner in Residence" activity (1986-1987) in which livestock leaders worked for a number of months in US farms.

The opportunity for networking with other project leaders has proven to be a valuable activity to develop leadership. HPI will continue to provide and expand these opportunities in future programs.

One phenomenon in leadership development that HPI has noticed is the contrast in female leadership from the women's groups and the lack of female leadership in the mixed-gender groups. In the integrated groups the men are more inclined to take the leadership roles. The unique opportunity for female leadership development in women's groups is an additional reason for focusing special attention towards women's projects.

7. Innovation and Technology Transfer

Innovations and technology are most successfully embraced when immediate and valuable benefits are seen by the participants. In the Luwu aquaculture program technical innovations from USAID-sponsored Water Harvesting / Aquaculture Project (WH/AP) technicians have lead to observable increases in production capability. These methods were readily accepted by the local farmers. On the other hand, teaching farmers in Thailand to apply manure to the ponds to encourage the growth of plankton has been much more difficult, due to the fact that the changes produced are much slower and are not readily observable.

HPI has been the most successful in spreading the use of innovation and technology which stems from the experiences of the rural poor rather than using top-down technology. The Exchange newsletter is an example of this type of technology transfer. Only practical information, which has been tested in a non-industrial setting is included.

Providing exchange opportunities between countries has proven to be a very useful method to spread new ideas and methods. HPI has provided opportunities for representatives, project organizers and animal technicians to visit other areas, seminars and development projects. The HPI Thailand Representative, after a visit to the Philippines, has applied some ecologically sustainable agricultural practices from the Philippines.

The transfer of technology between countries has occurred, sometimes deliberately and sometimes through neighbors copying neighbors. The most notable transfer of HPI's livestock technology is the rapid spread of the zero-grazing technique which has spread throughout Tanzania and Kenya and into Uganda.

Other livestock methods have been popularized such as the use of oxen for draft power in Africa, the production of guinea pigs in Latin America, and the use of regenerative aquaculture in Indonesia and Thailand.

8. Policy Implications

HPI projects have proven again and again that the smallholder is a good investment in livestock development. Some governments, through HPI examples, have recognized this fact. For example, the Ugandan government, after previous bad experiences with large herd development and after seeing HPI's success with smallholders is supporting a "White Belt" program. A belt of smallholder milk producers located around the major metropolitan areas will be developed to increase local milk production. Another example is the Government of Zimbabwe which has offered its support to livestock projects in areas in which HPI has pioneered projects.

Areas of policy importance to the small farmer are the availability of extension workers, pricing of animal feeds, market prices for animal products, the availability of veterinary supplies, land issues, and subsidization programs.

At HPI conferences the exposure of government officials and people in the local business and development community to issues which concern the small farmers has sometimes resulted in policy change. After the Conference on Ecological Sustainability in Peru in 1988, the Ministry of Agriculture released a policy statement on the change of focus from beef herds to multi-purpose (beef and milk) cattle, a policy favorable to the small farmer.

9. Collaboration/networking with other agencies

By combining efforts, inputs and expertise with other agencies, the output is often synergistic – the effect is better than the sum of the two individual results. Some of the agencies HPI has worked with include Technoserve, Water Harvesting/Aquaculture Project (WH/AP), American Friends Service Committee, Volunteers in Technical Assistance (VITA), Mennonite Central Committee, Action for Food Production, Winrock International, Bread for the World, and Christian Care.

Because collaboration takes much time and effort, the potential benefit to both sides must be examined before entering into a relationship. Working with a few agencies on limited well-defined collaboration has been the most effective method of networking for HPI.

HPI has found that the most effective method of collaborating with other agencies is to have a specified goal with the roles and responsibilities between the agencies defined. In HPI's work with Technoserve in Kenya a "Memo of Understanding" defines the relationship between the two organizations. HPI prefers to give its field staff autonomy within broad parameters in developing working relationships between agencies.

10. Replication Potential of Project Approach and Activities

The effectiveness of HPI's approach to developing small farmer sustainable livestock programs has been demonstrated over many years. The project system – the pass-on, building on local initiatives, providing a total livestock package – has proven to be a very replicable system.

Other groups, with no HPI funding or encouragement, have copied the HPI system, just by observation. In Zimbabwe some development groups have started dairy projects using the HPI model calling them "Heifer Projects". In Uganda the World Food Program and the Ugandan government have started a livestock project using the same requirements, technology package, and pass-on elements as the HPI model.

VIII. RECOMMENDATIONS

1. To Project Leadership

Through communication with the field and in light of the suggestions made by the USAID Mid-Term Evaluation team, the following recommendations for the future were proposed by the project management:

- a). Strengthen the training component of livestock projects by increasing funding for training, providing more training opportunities and developing a livestock training curriculum.
- b). Intensify the targeting of women as beneficiaries of livestock, training and leadership development.
- c). Continue to place a high priority on the inclusion of animals as a part of a regenerative agricultural system.
- d). Establish a project reserve fund.
- e). Aid the flow of ideas and techniques between projects and regions and stimulate dialogue and policy change through conferences, symposiums, exchange opportunities, The Exchange newsletter and technical information service.

2. To Country and Program Leaders

- a). Provide emphasis on leadership and management training in addition to technical skills training.
- b). Continue to utilize other appropriate international, governmental and voluntary funding sources.

- c). Emphasize the importance of accurate project reporting.
- d). Realize the impact of government policy to the small farmer and take an active role in educating those who can affect this policy.

3. To Donors or Other Organizations Seeking Similar Impacts

- a). It is important to again stress the long-term commitment required by livestock projects. An organization interested in sponsoring livestock projects must be ready to make a large initial input and then provide follow-up and additional aid for at least five years. In the case of cattle, around three years is required for the farmer to pass-on another heifer of breeding age, the same age as the one that was received. If the first offspring is a male, this process could take four years.

The magnitude of the outputs though, increase with the years and the outputs are sustainable over many years. In Chile, more than 500 prime dairy goats have been passed on from a 26 goat project 14 years ago. In Japan and Korea the pass on process is still working in projects that officially ended 25 years ago.

- b). A livestock project implemented correctly, will be ecologically sustainable and will add to the efficacy of the entire agricultural system. Animals act as a regenerative element in the environmental cycle, consuming forage or crop by-products unuseable by humans, and then restoring the soil's fertility with the manure. It is important to realize that approximately 40% of all land in developing countries can only be used for forage or grass production. A further 30% is forest areas with some forage production potential. Less than 10% of the Earth's surface is cultivatable.
- c). The benefits of livestock are many and with small scale livestock projects the benefits go directly to the poorest rural families. The milk, meat, and eggs produced by livestock add protein to the diet. In a farming system, livestock act as a hedge against crop failure. Livestock are a major source of income for many farmers and act as insurance against hard times.

Because of these obvious benefits, the ownership of livestock is highly valued; livestock take on a cultural significance, and livestock projects are in high demand by the rural poor. It is because HPI responds to this demand, a development strategy voiced by the rural poor, that HPI programs are both appropriate and effective.

With this matching grant much has been accomplished. Many people's lives have changed for the better. Families have more food for their children and more money for housing and education. In the Dominican Republic and Thailand people who had no land now have land. Widows in Zimbabwe can now feed their children. Youth in Zambia who had no livelihood now can farm their land. Improved breeds of livestock which are more productive and hearty, are replacing or crossbreeding with the local animals. Farmers are using new livestock skills to keep their animals healthy and productive.

Communities have also benefited. Organizations, churches and cooperatives were formed or strengthened. Leaders developed and received training. Governments saw working examples of small farmer efficiency and effectiveness and incorporated these ideas into policy decisions. New and old livestock methods such as zero-grazing, oxenization, producing guinea pigs and regenerative aquaculture gained popularity and spread throughout nations. Many people became aware of ecological issues and many learned ways to incorporate livestock into farming systems, making the system more sustainable.

Heifer Project International has undergone an organizational metamorphosis over the last three years. The staff has more than doubled. Income has increased from \$6.1 million in 1984 to \$9.2 million in 1988. A new headquarters building has been equipped with an on-line state-of-the-art computer system. A Management Information System has revolutionized HPI's financial reporting capabilities. HPI's accounting system has changed from a calendar year to a fiscal year and a database has been developed to facilitate project monitoring and evaluation. With all these changes the organization is reaching a new stage of development and professionalism.

In the field, HPI has developed and strengthened "country programs" - providing permanent staff, either directly employed by HPI or contract representation. Staff and project organizers have received training and opportunities to exchange ideas with others involved in livestock projects. Project reporting forms and procedures have been revised and improved. Ongoing evaluations have provided feedback for project design. An increasing number of livestock project proposals are being submitted and screened through a revised screening process. The Exchange newsletter and the Technical Information Service have seen dramatic increases in their distribution.

The accomplishments made possible by this Matching Grant will have lasting effects on rural farmers, communities, and the HPI organization. HPI has now developed the professionalism, infrastructures and experience to become a major player in the small-scale livestock development field.

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

AID FORM 1550-11

For programs in the following countries:

**Bolivia
Dominican Republic
Ecuador
Thailand
Indonesia
Kenya
Uganda
Zimbabwe
Zambia**

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0530
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type		Project Number	
Appropriation		Level	
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 2	

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-6-5137-00	
Start Date (MM/DD/YY) Sept. 29, 1985	End Date (MM/DD/YY) Sept. 29, 1988	AID Project Officer's Name Marguerite Potee	

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

HPI in Bolivia carries out its program by providing appropriate animals to low-income farm families; training for more efficient use of available resources in livestock production, and resources to stimulate self-help, community action, mutual aid and concern, and the stimulation of sustainable production systems to meet adequately family needs. Integrated development is carried out in the communities through agreements with colleague relief and development agencies specialized in other fields of activities indirectly related to animal production. Ecologically sound livestock projects are designed to conciliate with the traditional farming systems.

Status

Between 1985-1988 HPI's Bolivia country program has been comprised of 11 principal project holders who work in several hundred communities in 5 departments: La Paz, Oruru, Cochabamba, Potosi and Santa Cruz. By the end of 1988 the total # of new animals purchased or offspring passed on to new families (i.e. all animals under "active" contracts) are: 1480 bulls and heifers, 80 sheep, 75 goats, 58 pigs, 240 rabbits, 67 alpacas, 95 guinea pigs and 32,060 pullets. A total of 4,430 families have presently received livestock and training. (Due to the limitations of older report data there is not available at this time a cumulative number of animals previously distributed.) In April 1986, 182 participants attended the symposium on ecologically sustainable agriculture in the subtropics. In April 1988 a workshop was held on livestock production, environment and Andean culture in the highlands. Twenty-eight Bolivian project representatives attended.

COUNTRY INFORMATION (SECONDARY)

Country BOLIVIA	Location in Country (Region, District, Village) Santa Cruz
PVO Representative's Name Ing. Walter Henry	Local Counterpart/Host Country Agency N/A

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$	29.05	47.8	72.7	67.1
PVO \$	29.05	47.8	72.7	67.1
INKIND				
LOCAL				
TOTAL	58.1	95.6	145.4	134.2

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0630
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number		
Appropriation	Level		
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 2	

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 09/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

The program comprises 11 projects. The Los Llanos project promotes women in home livestock projects. The Monti Cristi, FEPROCA and CEVICOS Milk Project helps landless campesinos who use roadside pastures for their livestock. CEFASA helps over 100 community groups in 3 provinces with livestock projects and training. CAFESA deals with integrated agricultural projects and the Monti Cristi project helps banana plantation laborers. The SSID works in areas where animal husbandry has been neglected.

Status

The Los Llanos project has successfully placed 60 animals - cows and pigs - with local women who care for them individually or cooperatively. In the CEVICOS milk project 141 farmers were trained and supplied with a cow. Members of CEVICOS received 2,000 plots of land from the Land Reform Institute and 50 of the CEVICOS cows collectively produced 400 bottles of milk daily. The CEFASA group has trained over 500 participants in animal management skills as well as providing cows to group members. In the CAFESA project 655 families have received direct distribution or pass-on offspring. A total of 795 men and women have been trained in animal husbandry and beekeeping. In the Monti Cristi project 135 cows, sheep, goats or swine were distributed - half were pass-on animals. SSID has formed and trained 48 livestock committees with a total of 615 members.

COUNTRY INFORMATION (SECONDARY)

Country DOMINICAN REPUBLIC	Location in Country (Region, District, Village) Santo Domingo, Rep. Dom
PVO Representative's Name Dr. Carlos Zometa	Local Counterpart/Host Country Agency N/A

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988	
AID \$	35.1	53.2	104.7	95.9	
PVO \$	35.1	53.2	104.7	95.9	
INKIND					
LOCAL					
TOTAL	70.2	106.4	209.4	191.8	

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0530
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type		Project Number	
Appropriation		Level	
Country Code		Fund Type	Technical Code
Project Officer		Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 9/27/85	End Date (MM/DD/YY) 9/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

This project is being implemented through 4 major components: a). The Shuar Association Cattle Project, which assists Indian families in raising cattle, swine and sheep; b). The Totorillas Cooperative is being assisted in establishing a dairy cattle production cooperative considered to be an essential component for the Agrarian Reform Program effectiveness; c). The Pastaza Livestock Project, by which 6 Aboriginal communities are trained in the use of newer management and production practices for cattle, hair sheep, swine and chickens as well as grassland improvement; and d). The Chimborazo Sheep Improvement project in which purebred sheep have been introduced to improve wool production in 14 indigenous Quechua communities.

Status

By the end of 1988, these 4 projects will have received a total of 180 sheep, 101 cattle, 300 chickens and 39 pigs which directly assisted 203 families and in cases where animals were kept in herds they were shared by entire communities. A total of 23 communities were benefitted by livestock. In the projects where offspring were passed on to individuals, a total of 70 families received second generation animals: 32 sheep, 27 cattle, and 11 pigs. A training seminar on tropical animal husbandry was held at a local 4-H ranch for project representatives of the lowlands. A project representative and a Peace Corp volunteer from the Chimborazo project attended the HPI Bolivian symposium on sheep and alpaca production in the highlands. The symposium on the ecological impact of agricultural livestock farming systems in the Amazonian region was moved to Peru. The Ecuador Country Representative attended.

COUNTRY INFORMATION (SECONDARY)

Country ECUADOR	Location in Country (Region, District, Village)
PVO Representative's Name	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$	8.1	10.9	17.6	13.9
PVO \$	8.1	10.9	17.6	13.9
INKIND				
LOCAL				
TOTAL	16.2	21.8	35.2	27.8

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0630
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 9/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

Through counterpart agencies, HPI distributes locally purchased livestock. Training programs are held in the use of draft animals for developing rice paddy land. Through the Karen and Lahu cattle and goat projects, farmers are able to increase income and improve nutrition through the consumption of milk and the sale of meat. An aquaculture consultant aids the Karen Aquaculture Project in fish trials and training in northern Thailand.

Status

From 1987 and projected thru 1988 in North Thailand the Karen, Akha, and Lahu projects have distributed 305 cattle; 103 buffalo, 36 goats, 64 ducks, 6 swine, and over 3,800 fish fingerlings to over 612 tribal families and demonstration/training centers. Forty-nine cattle/buffalo have been passed on in the past 4 years, as well as over 4,600 fish fingerlings. Projects estimate that over 1,000 farmers have received training from 85-87. This does not take into account how many tribal groups who have received technical assistance from HPI-supported vet and aqua specialists.

COUNTRY INFORMATION (SECONDARY)

Country THAILAND	Location in Country (Region, District, Village) Chiang Mai 50000, Thailand
PVO Representative's Name Niwatchai Suknaphasawat	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$.2	18.0	9.6	25.7
PVO \$.2	18.0	9.6	25.7
INKIND				
LOCAL				
TOTAL	.4	36.0	19.2	51.4

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0630
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number		
Appropriation	Level		
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 2	

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 9/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

Three programs comprise the Indonesia program:

- FCC-Luwu Integrated Aquaculture and Poultry Project is developing a demonstration, training and extension network in prawn, milkfish, and chicken production. This project is aided also by USAID and WH/AP.
- Bina Swadaya Intensification and Improvement of Livestock Production provides training and cattle credit packages to local farmers.
- PUSPETA Livestock, Poultry, and Aquaculture Demonstration and Training Project trains farmers in integrated farming systems including new methods of aquaculture.

Status

From 1985 and projected thru 1988, Indo projects have distributed 5,986 chickens, 452,276 fish fingerlings, 131 goats, 1,100 quail, 367,876 shrimp, 189 cattle/buffalo, 50 ducks, 71 sheep, and 6 swine. Most of these animals were kept at project demo/training facilities with trainees receiving pass-on livestock; other participants received livestock credit packages through Bina Swadaya. Some 129 participants have received credit packages totaling 580 poultry, 85 cattle/buffalo, and 71 goats.

Training is major emphasis of all 3 projects. The training centers and demonstration units have trained farmers in integrated farming systems. It is estimated that some 1,100 farmers have received training.

COUNTRY INFORMATION (SECONDARY)

Country	Location in Country (Region, District, Village)
INDONESIA	Klaten, Sumatra, Kalimantan
PVO Representative's Name	Local Counterpart/Host Country Agency

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$	68.5	37.0	65.8	46.8
PVO \$	68.5	37.0	65.8	46.8
INKIND				
LOCAL				
TOTAL	137.0	74.0	131.6	93.6

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0530
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number		
Appropriation	Level		
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 2	

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 09/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

In Kenya HPI is working with 7 project groups composed of small-holder farmers. They are being trained to use the zero-grazing method of raising dairy cattle. This is a method that HPI is popularizing in several countries in Africa. Cattle are kept in a pen and food is brought to the animals. This method limits exposure to ticks and disease and allows for collection of manure to be used as fertilizer. Women play an important role in several of the project, holding positions at management level. One experimental project is introducing camels to the Maasai of southern Kenya.

Status

The farmers have received 221 heifers. Of these, 72 were pass on animals. A total of 44,994 people days of training were given in 36 training sessions. The zero-grazing system is receiving wide acceptance among Kenyan villagers who are selling their local animals and buying improved breeds so that they too can profit from increased milk yields. Excellent support from the Ministry of Agriculture and well-training extension workers give Kenyan projects a head start over those of most other African countries. HPI is represented in Kenya by Technoserve Inc. which is highly respected for its knowledge in small-holder livestock development.

COUNTRY INFORMATION (SECONDARY)

Country KENYA	Location in Country (Region, District, Village) Western Province, Kakemega, and Home Bay Rift Valley in Nakuru
PVO Representative's Name Geoffrey Burrell, Technoserve, Inc.	Local Counterpart/Host Country Agency Catholic Diocese of Nakuru, Gambogi Dairy Farmers Group, Pusu Women's Group

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$	19.3	33.5	16.6	22.0
PVO \$	119.3	74.3	16.6	22.0
INKIND				
LOCAL				
TOTAL	138.6	107.8	33.2	44.0

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0530
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number		
Appropriation	Level		
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 2	

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 09/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

HPI sponsors 5 on-going zero-grazing small-holder dairy cattle projects in Uganda. One project also distributes pigs to limited resource farmers. The Ugandan Government has as a priority the rehabilitation of the dairy industry that had suffered severely under the Amin and subsequent regimes. The projects provide breeding services for repopulation and upgrading of local stock, and provide milk and income to the participants. Formal, as well as practical training in zero-grazing dairying is given to each farmer. Two of the projects are predominately oriented towards women with children, most of whom lost their husbands in the ongoing civil strife. HPI is represented in Uganda by the Church of Uganda.

Status

A total of 509 dairy cattle and 78 pigs have been distributed to an equal number of families. Of these, 56 are pass-on animals. Since the start of the grant, 21,343 people days of training were given in 60 training sessions. Milk production has increased, raising farmers' effective income by 200-300%. The families' health has greatly improved due to increased protein intake. The manure collected through the zero-grazing system is used to improve production of vegetables and bananas. Three projects were severely affected by the civil war. The Government, which previously had only dealt with wealthy farmers, now has recognized the potential of the small-holder dairy development strategy and the new grazing system. It is now considering a "White Belt" around Kampala consisting of small dairy farmers who will supply the city with milk.

COUNTRY INFORMATION (SECONDARY)

Country UGANDA	Location in Country (Region, District, Village) Northern, Eastern and Southwest Uganda
PVO Representative's Name Bernard Muyeya	Local Counterpart/Host Country Agency YWCA, Church of Uganda, Ministry of Cooperatives, Marketing & Uganda Catholic Secretariat

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$	36.5	46.1	83.3	97.0
PVO \$	48.5	64.0	83.3	97.0
INKIND				
LOCAL				
TOTAL	85.0	110.1	166.6	194.0

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0630
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number	
Appropriation	Level	
Country Code	Fund Type	Technical Code
Project Officer	Key 1	Key 2

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 09/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

HPI is in the initial stages of developing its Zimbabwe program. The of the projects is to aid widows and youth who have resettled after having lost everything during the country's War of Independence. These villagers are in need of cattle, both as draft animals and for the nutritive value of the milk. Malnutrition is a severe problem among the resettled people. Cattle has also been distributed to two youth training centers to be used as demonstration animals. Pass-on animals go to the youth and to the local villagers who are also part of the projects. A contract for representation was signed with Christian Care in late 1986.

Status

A total of 115 cattle and 98 pigs have been distributed to farmers. Of these, 74 are pass-on animals. Since the start of the Grant, 4,068 people days of training were given in 24 training sessions. The most severe draught in 30 years plagued Zimbabwe from 1985 until early 1988. The people, as well as the animals, suffered greatly. The HPI animals fared much better than the surrounding animals, proof that HPI training and technical backstopping had a positive effect. During the grant period Government extension service was extended to HPI project holder areas. A Mid-Term USAID evaluation was completed in 1987.

COUNTRY INFORMATION (SECONDARY)

Country ZIMBABWE	Location in Country (Region, District, Village) Shurugwe, Midland; Mutare, Manicaland Chikore, Chipinge
PVO Representative's Name Charles Shoniwa	Local Counterpart/Host Country Agency Church of Christ, Christian Care, and United Methodist Church

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988	
AID \$	13.4	4.6	14.4	29.9	
PVO \$	13.4	4.6	14.4	29.9	
INKIND					
LOCAL					
TOTAL	26.8	9.2	28.8	59.8	

**PVO PROJECT REPORTING INFORMATION
ON AID SUPPORTED PVO PROJECTS**

OMB No. 0412-0630
Expiration Date: 03/31/89

FOR OFFICIAL USE ONLY

PVO Type	Project Number		
Appropriation	Level		
Country Code	Fund Type	Technical Code	
Project Officer	Key 1	Key 2	

PROJECT INFORMATION (PRIMARY)

Name of Organization Heifer Project International		Grant/Contract Number PDC-0258-G-5137-00
Start Date (MM/DD/YY) 09/29/85	End Date (MM/DD/YY) 09/29/88	AID Project Officer's Name Marguerite Potee

AID OBLIGATION BY AID-FY (\$000)

FY	AMOUNT	FY	AMOUNT

LOP

Activity Description

HPI is working with 5 projects in Zambia, 3 of which were started during the last year of the grant. Three of the projects focus on the introduction of draft animal power to Zambian communities, which had been relying on unreliable and costly tractor power. Another goal of the Zambia program is to provide employment opportunities to "school leavers". Small groups of youth are provided with oxen, equipment and training to provide a means to farm their land. One project is providing improved goats to a teachers' college which will use them for practical training and to cross with the local animals.

Status

A total of 86 oxen, 75 heifers and 46 goats have been distributed. Most pass-on animals stay at the various training centers. Training has been given to 755 youths and 530 adults. The HPI oxenization program is acting as a model for many communities now interested in draft power. The villageers have adapted extremely well to this new method of land cultivation. HPI was instrumental in organizing a three-day conference on oxenization. A new contractual agreement for representation was signed with the Christian Council.

COUNTRY INFORMATION (SECONDARY)

Country ZAMBIA	Location in Country (Region, District, Village) Northern and Central & Southern Zambia
PVO Representative's Name	Local Counterpart/Host Country Agency Christian Council of Zambia; Boys Brigade of Zambia; Malcolm Moffat College

COUNTRY FUNDING INFORMATION (\$000)

YEAR	1985	1986	1987	1988
AID \$	3.6	6.4	13.8	37.6
PVO \$	18.0	6.4	13.8	37.6
INKIND				
LOCAL				
TOTAL	21.6	12.8	27.6	75.2

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Project Design Summary - Logical Framework
HPI/AID Matching Grant - 1985-87

Narrative Summary	Objectively Verifiable Indicators	Means of Verification
<p>1. The overall good of this project is to improve the social and economic conditions of limited resource rural families in selected developing countries in Latin America, Caribbean, Asia and Africa through livestock development projects.</p>	<p>Measurable increase in livestock production (meat, milk, fibre, draft power), participation in projects by beneficiaries, income, consumption and strengthened local organizations.</p>	<p>1. Field visits and surveys by HPI program staff. 2. Records and Reports of projects</p>
<p>activities Improve the capability of project organizations, community groups to carry out livestock projects. Increase the number of rural families who benefit from projects, through the "Passing on the Gift" system. Improve the quality and quantity of training, technical service, and follow up to projects.</p>	<p>End of Project Status 1. Well functioning HPI Country Program in each of the selected countries. 2. An average of 5-7 livestock projects in each country, with a high probability of self-sufficiency. 3. Project leaders with improved skills in animal husbandry, planning, management and evaluation. 4. Project participants with better livestock production, income and/or nutrition for families, with a system for ongoing sharing of benefits with others.</p>	<p>1. Semi Annual Progress Reports 2. Semi Annual Financial Reports 3. Project field visits Reports by HPI Representatives 4. Evaluations</p>
<p>outs Community groups functioning with self-sustaining activities. Livestock and their offspring distributed and producing. Training for project staff & project participants Training materials identified and/or developed and utilized. Competent personnel for follow up and technical services Exchange News letter</p>	<p>1. Approximately 5-7 projects per country per year 2. Each project will have trained its participants to productively use livestock. 3. At least 1 major Regional Encounters for Sharing & training between projects. 4. A system for adequate follow up, monitoring & Technical backstopping in each country. 5. A functioning and just "Passing on the Gift" system in every project. 6. 18 Exchanges and other technical materials distributed.</p>	<p>1. Project Records 2. Production & Animal Inventory Reports 3. Mid-project evaluation 4. HPI project reports</p>
<p>ts Funds from HPI and AID Livestock and related supplies Professional Personnel, technicians Project organization staff and material resources. Attention, training, and Training materials</p>	<p>1. Funds transferred & Receipt confirmed 2. Livestock purchase or shipments made successfully and on a timely basis. 3. Technical assistance by HPI Representatives or consultants available when & where needed. 4. All projects visited and reporting on a consistent basis.</p>	<p>1. Ongoing monitoring by HPI 2. Annual reports on projects 3. Independent Audits 4. HPI computerized Accounting System.</p>

Logical framework (cont.)

Important Assumptions

1. That livestock projects are viable, cost-effective and appropriate vehicles for bringing about socio-economic development for limited-resource rural families in developing areas.
-

1. That project organizations will utilize livestock, and other inputs, and are competent to help the target groups.
 2. That increased livestock production bring improved life situations for the rural poor (participants)
 3. That appropriate training leads to increased benefits from livestock projects.
-

1. That HPI can identify & work with grass-roots participatory organizations.
 2. That appropriate livestock, materials, and training will be planned & supplied.
 3. That trainees will return and continue to work with the projects.
 4. That HPI can hire and/or contract competent field staff.
-

That the various participants in this endeavor - HPI, AID, & project counterpart organizations will give continuity in support so as to foster self-sufficiency while not creating dependency, and that project participants will invest their own resources as well.

PROJECT SUMMARY

Narrative Summary	Objectively Verifiable Indicators	Actual Accomplishments
Goal		
1. The overall goal of this project is to improve the social and economic conditions of limited resource rural families in selected developing countries in Latin America, Caribbean, Asia and Africa through livestock development projects	Measurable increase in livestock production (meat, milk, hides, draft power), participation in projects by beneficiaries, income, consumption, and strengthened local organizations.	Livestock production has measurably increased food and income of most project participants. Beneficiaries plan and implement their own projects. Local organizations are strengthened, policy changes have occurred and new livestock methods have become popularized.
Objectives		
1. Improve the capability of project organizations, community groups to carry out livestock projects. 2. Increase the number of rural families who benefit from project, through the "Passing on the Gift" system. 3. Improve the quality and quantity of training, technical service, and follow up to projects.	End of Project Status 1. Well functioning HPI Country Program in each of the selected countries. 2. An average of 5-7 livestock projects in each country, with a high probability of self-sufficiency. 3. Project leaders with improved skills in animal husbandry, planning, management and evaluation.	1. Country programs developed or improved in Ecuador, Bolivia, Dominican Republic, Kenya, Uganda, Zambia, Zimbabwe, Indonesia and Thailand. 2. This grant funded over 60 projects in 9 countries. 3. Project leaders have attended training meetings both locally and nationally. Many have helped in systemic changes such as land acquisition for groups.
Outputs		
1. Community groups functioning with self-sustaining activities. 2. Livestock and their offspring distributed and producing. 3. Training for project staff & project participants. 4. Training materials identified and/or developed and utilized. 5. Competent personnel for follow up and technical services. 6. Exchange Newsletter	1&2. Approximately 5-7 projects per country per year 3. Each project will have trained its participants to productively use livestock. 3. At least 3 major Regional Encounters for sharing & training between projects. 4. A system for adequate follow-up, monitoring & technical backstopping in each country. 5. A functioning and just "Passing on the Gift" system in every project. 6. 18 Exchange newsletters and technical materials	1. Over 60 projects in 9 countries funded. 2. Cattle, goats, swine, poultry, sheep, rabbits, alpacas, guinea pigs, shrimp, buffalo, oxen, beehives, shrimp distributed 3. Well over 20,000 participants trained in training events. More trained on-site by technicians 3. 7 Conferences, 6 Regional Encounters, 2 Regional Director's Meetings, 4 International Training Workshops 4. New MIS system in operation, database being developed. Semi-annual project reports received from projects. 5. Passing on the Gift working well in some, projects, inadequately in some and it is too soon to judge in most projects. 6. 17 Exchanges distributed to a total of 12,750 people or groups. 12,000 requests for technical information filled.
Inputs		
1. Funds from HPI and AID 2. Livestock and related supplies 3. Project personnel, technicians 4. Project organization staff and material resources. 5. Attention, training, and training materials.	1. Funds transferred & receipt confirmed 2. Livestock purchased or shipments made successfully and on a timely basis 3. Technical assistance by HPI representatives or consultants available when & where needed 4. All projects visited and reporting on a consistent basis.	1. \$3,653,610 transferred & confirmed by 9/88. 2. Approximately 3754 cattle, 800 goats, 628 swine, 42,538 poultry, 526 sheep, 286 rabbits, 67 alpacas, 95 guinea pigs 367,876 shrimp, 134 buffalo, and 665,884 fish distributed. 3. 6 Project Directors, 7 Country Reps. and 4 consultants provided technical assistance. 4. 39 country visits by HPI Nat'l office staff. Semi-annual reports received from most projects.

**HPI Work Plan for Matching Grant
Planned vs. Actual**

PlannedActualYear One

- | | |
|--|--|
| 1. All projects screened and approved. | 1. 25 projects screened and approved. |
| 2. Inputs scheduled and provided. | 2. Inputs were scheduled and provided to projects in 10 countries. |
| 3. Project expansion survey done in Zambia, Botswana, Zimbabwe, Thailand | 3. Consultant studied Zambia - arranged HPI representation with Christian Council. Consultant to Zimbabwe wrote five-year plan. Botswana not studied due to HPI consolidation strategy. Thailand program was surveyed and implemented. |
| 4. Design Cameroon strategy to make transition from OPG to Matching Grant. | 4. Availability of USAID/YAOUNDE funds reduced. HPI gained support from private and church sources for HPI Cameroon program. |
| 5. Survey redesign of Eastern Carribean region. | 5. This was included in the high budget MG proposal which was not approved by USAID. |
| 6. Region-wide Consultations with HPI field staff and representatives in Eastern Africa and the Andean Region. | 6. In October of 1986 a workshop was held in <u>Tanzania</u> and in April the Ecological Symposium was held in <u>Bolivia</u> . In addition, a Project Holder's Conference was held in <u>Guatemala</u> , with project holders and representatives from <u>Ecuador</u> , <u>Bolivia</u> and the <u>Dominican Republic</u> in attendance. |
| 7. Hold the Second Annual "Institute on Livestock in Development". | 7. The Second Annual Institute on Livestock in Development was held in August 1985. |
| 8. Produce and distribute six technical newsletters, the <u>EXCHANGE</u> . | 8. Six <u>EXCHANGE</u> newsletters produced and distributed. |
| 9. Complete annual progress report. | 9. Annual progress report completed. |

Year Two

1. Continue assistance to project partners in program planning, and especially in project monitoring.
 2. Assess training & exchange experiences and plan second year of training events. Possibility of a region-wide consultation in Asia, and one in Southern Africa.
 3. Continue inputs to previously approved multi-year projects and screen and approve new projects.
 4. Produce and distribute six EXCHANGE newsletters. Do an evaluation and make corresponding improvements.
 5. Hold an Annual "Institute on Livestock in Development".
 6. Carry out evaluation of selected MG projects, with maximum participation by local project staff and project groups.
 7. Conduct a mid-term evaluation and review of the Matching Grant program by a team composed of HPI staff, an independent consultant and an AID-provided consultant.
 8. Submit an annual progress report to USAID.
1. Project planning was enhanced by project holder's meetings and other conferences. HPI revised many basic project forms to be more easily understood.
 2. Training & exchange activities were assessed. More conference-type training events were funded. Two large conferences were held:
 - a). The Conference on Animal Production and Leadership in the Dominican Republic.
 - b). The Symposium on Livestock and Environmental Conservation in Peru
 3. Forty-seven new and multi-year projects accepted through screening process.
 4. Five EXCHANGE newsletters produced and distributed. One newsletter was a combined issue. Readers surveyed for input and suggestions.
 5. The Third Annual "Institute on Livestock in Development" was held in August, 1986
 6. Evaluation completed for projects in Uganda, Zambia, Kenya, Indonesia, Zimbabwe, and the Dominican Republic
 7. Mid-Term Evaluation completed.
 8. Annual Progress Report submitted to USAID.

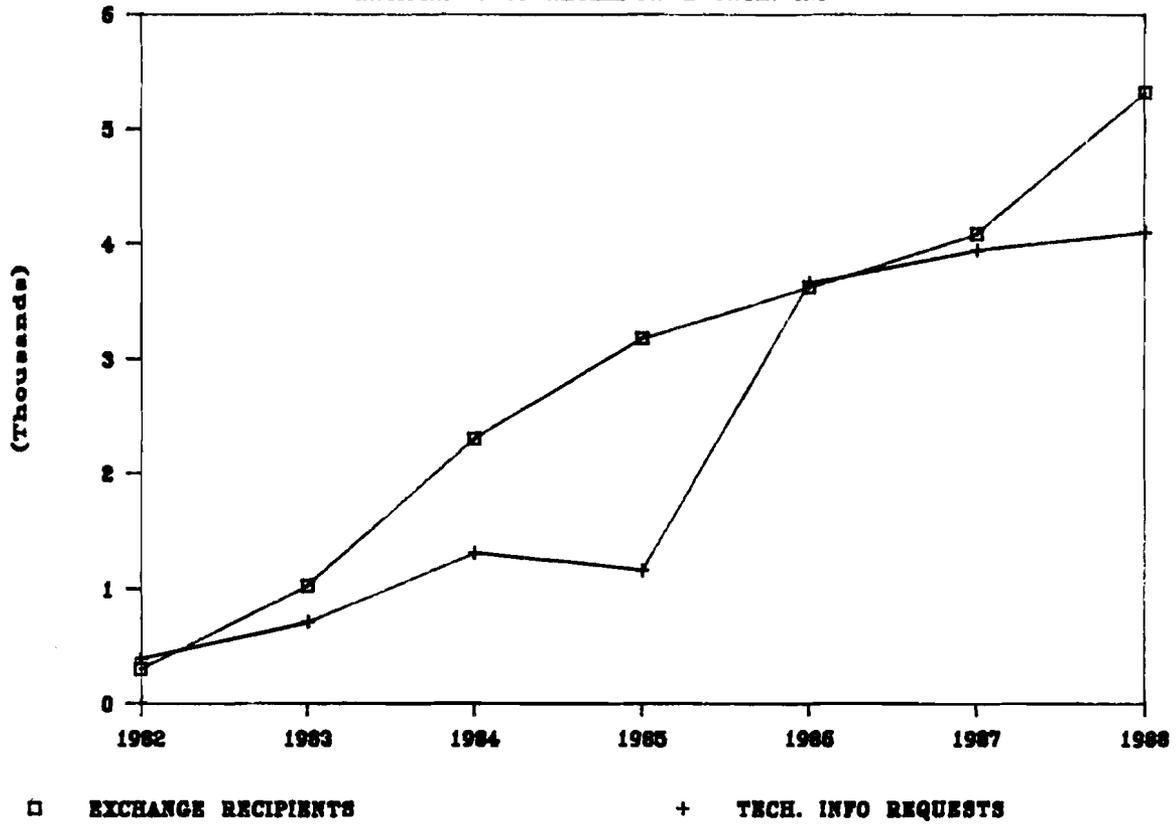
Year Three

1. Screening of new projects to be added and terminating support of those which can now function without HPI assistance.
 2. Continue to assist Matching Grant projects with follow-up and project inputs.
1. Project screening process completed. Funding terminated for some projects such as Farming Systems Kenya and the FCC-Luwu Project in Indonesia.
 2. Forty-seven projects were funded and assisted by HPI.

3. Hold at least one regional consultation.
 4. Carry out evaluations in selected projects and use results as part of review of the Matching Grant and planning for future programs.
 5. Conduct a final evaluation of selected country programs.
 6. Submit a final report to AID.
3. Three conferences and two directors' meeting were held in 1988:
 - a). Workshop on Animal Health - Uganda
 - b). Sheep and Alpaca Workshop - Bolivia
 - c). Alternative Agriculture Workshop - D.R.
 - d). Directors' Meeting - India
 - e). Directors' Meeting - Peru
 4. Numerous evaluations carried out (See Attachment 3E). Conclusions, especially from USAID Mid-Term Evaluation, used in long-term planning and in proposal for new Matching Grant.
 5. Final evaluation of country programs in Ecuador and Bolivia will be conducted in late fall by HPI staff.
 6. Final Report Submitted August, 1988.

"EXCHANGE" NEWLETTER

RECIPIENTS OF EXCHANGE & TECH. INFO.



HPI CONFERENCES AND SYMPOSIUMS

<u>Year</u>	<u>Country</u>	<u>Title</u>
1988	Bolivia	Workshop on the Effects of Sheep and Alpacas to the Environment
1988	Dominican Republic	The Alternative Agricultural Conference
1988	Peru*	Rabbit and Guinea Pig Conference
1987	Peru*	Symposium on Environmental Conservation
1987	Dominican Republic	Conference on Tropical Animal Production & Leadership
1987	Zambia	National Conference on Oxenization
1986	Bolivia	Symposium on Environmental Conservation and Livestock
1985	United States	2nd Annual Institute on Livestock in Development
1986	United States	3rd Annual Institute on Livestock in Development
1987	United States	4th Annual Institute on Livestock in Development
1988	United States	5th Annual Institute on Livestock in Development

PROGRAM MANAGEMENT AND TRAINING MEETINGS

<u>Year</u>	<u>Country</u>	<u>Title</u>
1988	Uganda	Project Holder's Conference
1988	Peru	Latin America Director's Meeting
1988	Thailand	Project Holders Training/Exchange Tour
1988	India	Program Director's Meeting and Project Holder's Conference
1987	Bolivia	Bolivia Project Holder's Workshop
1987	Zimbabwe	Project Holder's Conference
1986	Tanzania	HPI Africa Program Workshop
1986	Guatemala*	Project Holder's Conference

*Persons from Matching Grant countries, partially or wholly funded by Matching Grant funds were in attendance.

HPI EVALUATION ACTIVITIES IN MATCHING GRANT COUNTRIES

<u>Year</u>	<u>Country</u>	<u>Description</u>
1988	Indonesia	A study of HPI's need for representation in Indonesia is being conducted by Ms. Kate Geiger, HPI's Philippine Representative.
1988	Bolivia	A final evaluation of the <u>Bolivian Program</u> will be conducted by <u>HPI's</u> Director of Latin America and Director of Budgets & Grants.
1987	Zimbabwe/ Dominican Republic	The <u>HPI-USAID Mid-Term Evaluation</u> was completed by an evaluation team composed of Gordon Appleby, Armin Schmidt and Peter Linberg.
1987	Indonesia	A comprehensive evaluation of the <u>Bina Swadaya Project</u> collected baseline data from project holders and was completed by a project manager, the HPI Asia Director and an outside consultant.
1987	Uganda	The <u>YWCA/HPI projects</u> in Uganda were evaluated by Kenneth O'Kello, DVM, an independant consultant.
1987	Kenya	The <u>Nakuru Farming Systems Projects</u> were evaluated by an independant consultant.
1986	Uganda	The Busoga Dairy Project was evaluated by Kenneth O'Kello, DVM, an independant consultant.
1986	Zimbabwe	Christian Care and the United Church of Christ jointly reviewed the <u>Chikore Project</u> .

LIVESTOCK AND TRAINING OUTPUTS BY COUNTRY

Attachment 3E

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<u>PROJECT NAME</u>	<u>TYPE OF ANIMAL</u>	<u>ANIMALS PURCHASED</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>PASS-ON ANIMALS</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>TRAINING SESSIONS</u>	<u>PEOPLE TRAINED</u>
INDONESIA							
FCC-Luwu Integrated Aquaculture and Poultry Project (NCBA)	Ducks	50	Training/ Demonstration Ctr.	190,168		8	108
	Chickens	2,000					
	Fish	406,826					
	Shrimp	200,000					
Intensification and Improvement of Livestock Production (Bina Swadaya)	Chickens	1,160	49	credit package loans are passed on, not animals		10	587
	Cattle	136	130				
	Buffalo	24	8				
	Goats	131	30				
	Sheep	71	12				
PUSPETA Livestock, Poultry and Aquaculture Demonstration and Training Project (NCBA)	Cattle	29	Training/ Demonstration Ctr.			24	414
	Chickens	2,826					
	Quail	1,100					
	Shrimp	167,876					
	Fish	45,450					
THAILAND							
Animal Raising Project for Akha	Cattle	124	124	27	27	9	196
	Buffalo	103	99	7	7		
Karen Aquaculture Project	Ducks	64	CUHT Cntr	4,600	10	4	73
	Swine	6					
	Fish	1,440					
Lahu Goat Project	Goats	26	26			11	155
Lahu Beef Project	Cattle	205	205			7	133
Karen Dairy	Cattle	152	152	15	8	20	262
	Goats	10	9				

Numbers are estimates using projected outputs for period of 1/88 - 9/88.

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<u>PROJECT NAME</u>	<u>TYPE OF ANIMAL</u>	<u>ANIMALS PURCHASED</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>PASS-ON ANIMALS</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>TRAINING SESSIONS</u>	<u>PEOPLE TRAINED</u>
ECUADOR							
Shuar Association Cattle Project	Swine	60	60	13	13	4 (1 week)	13
	Bulls	5	herd				
	Heifers	32	27	16	16		
Totorillas	N/A						
Chimborazo Sheep Project	Sheep	165	154	17	17	34	1480
Pastaza	Chickens	251	N/A			2 (1 week)	14
	Heifers	36	N/A				
	Bulls	9	N/A				
	Hairsheep	12	N/A				
BOLIVIA							
Country Representative - Umbrella project funding.	Cattle	529	529	N/A	N/A	N/A	4,662
	Chickens	41,300	2000				
Kechuaymara Rabbit Project	Rabbits	240	community rabbitries	136	65	34	834
Altiplano Livestock	Sheep	36	36	N/A	N/A	N/A	N/A
	Chickens	2,400	N/A	0	0	N/A	N/A
Alfa Mayu-Jatun Cieniega	Goats	15	15	new	new	N/A	N/A

Numbers are estimates using projected outputs for period of 1/88 - 9/88.

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<u>PROJECT NAME</u>	<u>TYPE OF ANIMAL</u>	<u>ANIMALS PURCHASED</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>PASS-ON ANIMALS</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>TRAINING SESSIONS</u>	<u>PEOPLE TRAINED</u>
DOMINICAN REPUBLIC							
CEVICOS	Cattle	123	123	18	18	4	213
AED Swine Project	Swine	23	23	0	0	3	62
CAFESA Food for the Family	Cattle	54	54	30	30	4	101
	Beehives	99	99	N/A	N/A	N/A	150
Alfalit	Goats	85	53	N/A	N/A	10	182
	Rabbits	36	8	N/A	N/A		
Montecristi Family Cow, Sheep & Goats	Cattle	27	27	14	14	4	101
	Sheep	58	42	18	N/A	N/A	N/A
	Goats	55	25	22	N/A	N/A	N/A
Radio Santa Maria Swine Project	Swine	88	175	N/A	N/A	1	N/A
	Cattle	39	39	0	0	7	70
CEFASA	Cattle	87	87	N/A	N/A	6	90
	Goats	88	88	N/A	N/A	10	526
	Beehives	174	174	N/A	N/A	N/A	N/A
SSID Small Animal Production	Goats	147	76	109	N/A	69	247
	Sheep	45	27	32	N/A	N/A	N/A
	Swine	192	102	N/A	N/A	N/A	N/A
	Chickens	2,873	343	101	N/A	N/A	N/A
KENYA							
Pusu Women's Group	Cattle	10	10	10	10	9	164
Keiyo Marakwet Heifer Project	Cattle	15	15	16	16	5	533
Gambogi Dairy Farmers Group	Cattle	36	36	8	8	11	320
Nakuru Laymen Farm Services	Cattle	53	53	33	33	9	462
Nguriga F.C.S. Rare Demo Farm	Cattle	36	36	5	5	5	298
Ladariack Camel Project	Camels					1	15
Kakamega	Cattle	7	7	7	7	2	100

Numbers are estimates using projected outputs for period of 1/88 - 9/88.

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<u>PROJECT NAME</u>	<u>TYPE OF ANIMAL</u>	<u>ANIMALS PURCHASED</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>PASS-ON ANIMALS</u>	<u>RECIPIENTS (FAMILIES OR GROUPS)</u>	<u>TRAINING SESSIONS</u>	<u>PEOPLE TRAINED</u>
UGANDA							
Church of Uganda Livestock Improvement	Cattle	177	177	30	30	17	246
Busoga Dairy Development Program	Cattle	32	32	9	9	6	51
Uganda Ministry of Cooperatives/Tororo	Cattle	70	70	2	2	12	167
Uganda Catholic Secretariat	Cattle	62	62	15	15	16	97
	Swine	82	82	25	25		
YWCA	Cattle	117	117	51	51	12	363
ZAMBIA							
Chisha Mwamba's Village Livestock	Cattle	4	4			4	44
	Sheep	9	7	1	1		
	Goats	6	6				
	Ducks	4	2				
Malcolm Moffat Teachers' College	Goats	46	Training/Demonstration Center			Daily training	Student body of 90
Nashinga Cattle Community Project	Cattle	6	Demonstration Center			3	36
Boys' Brigade Livestock Project	Rabbits	10	Training Center			Daily Training	20
Twafwane Oxen Project	Cattle	155	21 Groups	Pass on is in form of animal labor		Daily Training	Youth 485 Adults 425
ZIMBABWE							
Chikore Farm Dairy	Cattle	45	45	19	19	11	330
Nyagadza/Craigmore Dairy	Cattle	40	40			4	40
Manyika Livestock Project	Cattle	11	11			7	295
	Swine	43	43	55	55		
Zvataifarira Cattle Breeding Project			Still in Training Stage			2	20
Numbers are estimates using projected outputs for period of 1/88 - 9/88.							1073g

BOLIVIA MGII HIGHLIGHTS

PROJECTS

Kechuaymara Rabbit Project
Altiplano Livestock/Bolivian Methodist Church
SONU/Alfa Maya Grant Project
UNAPEGA
Projects sponsored by the Bolivian Country Program

LIVESTOCK DISTRIBUTED

1,480 Cattle
80 Sheep
75 Goats
58 Swine
240 Rabbits
67 Alpaca
32,060 Chickens
95 Guinea Pigs

CONFERENCES

1988 The Conference on Alpaca and Sheep Production in the Highlands
1986 Symposium on Environmental Conservation

INSTITUTION BUILDING

The *Asociacion Ecologica del Oriente (ASEO)* was formed following the HPI 1987 Conference to examine ecological issues. A monthly bulletin on these issues is circulated to 400 persons.

The UNAPEGA Association has established animal supply outlets in 8 districts. It has also aided in obtaining credit for a small cheese factory in one district.

EVALUATION

An in-country evaluation of the HPI Bolivia Methodist Projects was completed in 1987 by the HPI Representative, project holders and project participants. In late 1988 a post-Matching Grant evaluation will be completed by the HPI Director of Latin America and the Director of Budgets and Grants.

NEW ANIMAL SPECIES

Katahdin hairsheep, a short-haired tropical breed used for meat and milk, was introduced in tropical areas and are doing well.

CONTRACT REPRESENTATION

Representation is provided by the Methodist Church in Bolivia. A Director and staff of 5 animal specialists, including a women's livestock project agronomist, are headquartered in Santa Cruz, Bolivia.

ACTION RESEARCH PROJECTS

A study of the native grasses of arid and subtropical areas was done by a specialist in forage production.

TECHNOLOGY TRANSFER

The raising of Chinchilla rabbits is being promoted among women of the Altiplano. This practice is readily accepted because of the food and income provided by the rabbits.

DOMINICAN REPUBLIC MGII HIGHLIGHTS

PROJECTS

CEFASA
Montecristi
Los Llanos
CAFESA
RADIO Santa Maria
AED Swine Project
Dairy Goat Raising (Alfalit)
Caritas Food for the Family
SSID Small Animal Production
FEPROCA
Cevicos

LIVESTOCK DISTRIBUTED

470 Dairy cattle
172 Sheep
691 Goats
315 Swine
36 Rabbits
3242 Chickens
106 Ducks
273 Beehives

CONFERENCES

1987 Conference on Tropical Animal Production and Leadership
1988 The Alternative Agricultural Conference

POLICY IMPACTS

Three project holder groups of landless campesinos - Montecristi, CEVICO, and FEPROCA have gained land through the Dominican Republic Land Reform Institute after demonstrating their need for land through HPI projects.

The Dominican Republic's Ministry of Agriculture will subsidize small dairy herd (10-20) development rather than large herd (500) development after exposure to HPI dialogue on the efficiency of small-holder dairys.

EVALUATION

The USAID Mid-Term Evaluation was completed in 1987. HPI has implemented changes based on the recommendations.

CONTRACT REPRESENTATION

Terra Nova, an umbrella group of HPI project holders, became HPI's new contractual representative in July of 1988. This group will manage HPI projects in addition to carrying out other community-based programs.

INSTITUTION BUILDING

The *Institutional Committee for Technology Transferring and Extension (CITTE)* was an outgrowth of the HPI program. Composed of business, university and development leaders this group is compiling a development manual for use in the Dominican Republic and Haiti.

PEACE CORPS COLLABORATION

A Peace Corps Volunteer works full-time with HPI and the FEPROCA project.

**ECUADOR
MGII HIGHLIGHTS**

LIVESTOCK DISTRIBUTED

112	Cattle
186	Sheep
38	Swine
300	Chickens

PROJECTS

Totarillas

Chimborazo Sheep Project

Shuar Association Cattle Project/AIPSE

Pastaza/AIEPRA

PASS ON ANIMALS

17	Sheep
16	Cattle
13	Swine

PEACE CORPS COLLABORATION

A Peace Corps volunteer works full-time with the members of the Chimborazo Sheep Project.

TRAINING EVENTS

Fourteen project participants were trained in a one-week seminar at the 4-H Ranch, Rancho Ronald.

NEW ANIMAL SPECIES

Corriedale sheep were introduced to crossbreed with the existing criolla sheep. The result has been a dramatic increase in wool production.

TECHNOLOGY TRANSFER

Semi-nomadic tribes were introduced to methods of raising domestic livestock to replace lost wildlife protein sources.

In tropical areas, project participants are taught the importance of proper agriforestry techniques. By leaving as many trees as possible and planting shade resistant forage, trees are available for fruit and lumber, save the soil, and attract wildlife (a food source) to the area.

INSTITUTION BUILDING

A wool marketing cooperative has been formed by the Chimborazo Sheep Project

THAILAND MGII HIGHLIGHTS

PROJECTS

Animal Raising Project for Akha

Karen Aquaculture Project

Lahu Goat Project

Lahu Beef Project

Karen Dairy Project

LIVESTOCK DISTRIBUTED

481 Cattle
103 Buffalo
64 Ducks
6 Swine
1,440 Fish
36 Goats

PASS ON

42 Cattle
7 Buffalo

TRAINING

51 Training Sessions
869 People Trained

TECHNOLOGY TRANSFER

1985

Drs. Herman & Sylvia Salk, Veterinary Consultants arrive in northern Thailand to work with tribal village groups for 7 months.

1986

Niwatchai Suknaphasawat, a Lahu project representative, and Yot, an Akha project representative visit Philippines for training exchange.

1987

Russell Gaulin (aquaculture consultant) is hired in September to work with the Karen project.

Short term veterinary consultant works with tribal groups from September to November.

1988

Niwatchai Suknaphasawat travels to India to attend HPI Representatives' meeting.

Niwatchai Suknaphasawat and Yot travel to China for training exchange.

HPI Thailand technical newsletter begins distribution in three languages.

Project holders training/exchange tour.

PUBLICATIONS

Goat manual translated into Karen.
Paraveterinary Manual produced by Drs.
Herman and Sylvia Salk.

CONTRACT REPRESENTATION

1987

Niwatchai Suknaphasawat is hired as HPI
Thailand Rep.

1988

Niwatchai Suknaphasawat becomes full-time
Rep.

INDONESIA MGII HIGHLIGHTS

PROJECTS

FCC-Luwu Integrated Aquaculture and Poultry Project (NCBA)
Intensification and Improvement of Livestock Production (Bina Swadaya)
PUSPETA Livestock, Poultry and Aquaculture Demonstration and Training Project (NCBA)

TRAINING EVENTS

1985 WH/AP Training
1986 WH/AP Training at Klaten (aquaculture)

TECHNOLOGY TRANSFER

New systems of aquaculture have been developed and taught to Indonesian farmers. Other nonproject farmers are picking up on these practices by observation.

Farmers were trained to grow, harvest and store appropriate feed grasses for their cattle. Farmers have also been taught the necessity of vaccinating the animals and the calf mortality rate has dropped.

CREDIT AVAILABILITY

Aquaculture participants have been given local bank loans based on the use of HPI-supported aquaculture systems developed at project demonstration/training centers. Other farmers interested in using the same systems have been offered the same loans, provided that they also receive training at the project centers.

CONTRACT REPRESENTATION

Indonesia Representation Survey scheduled for 1988 to assess HPI's representation needs in Indonesia.

EVALUATION ACTIVITIES

Bina Swadaya Evaluation 1987
PUSPETA, FCC-LUWU Evaluation 1988/89

LIVESTOCK DISTRIBUTED

165 Cattle
5,986 Chickens
24 Buffalo
131 Goats
71 Sheep
1,100 Quail
167,876 Shrimp
452,276 Fish
50 Ducks
6 Swine

PASS ON

205,168 Fish

TRAINING

42 Training sessions
1,109 People trained

ACTION RESEARCH PROJECTS

Local farmers in the FCC-Luwu prawn project participated in different trials to determine the best method of stocking prawn.

Assisted by HPI, PUSPETA developed feed packages for poultry, cattle and fish, utilizing the available feed resources.

**KENYA
MGII HIGHLIGHTS**

PROJECTS

Pusu Women's Group
Keiyo Marakwet Heifer Project
Gambogi Dairy Farmers Group
Nakuru Laymen Farm Services
Nguriga F.C.S. Rare Demo Farm
Ladariack Camel Project

LIVESTOCK DISTRIBUTED

149 Cattle

PASS ON ANIMALS

72 Cattle

NUMBER OF PEOPLE DAYS OF

EMPHASIS ON WOMEN

Women play key roles in several Kenyan projects and are the recipients of a good 50% of the distributed cattle and related training.

TECHNOLOGY TRANSFER

The zero-grazing system for dairy cattle, which is being popularized by HPI in many African countries, is receiving wide acceptance among Kenyan villagers. This pioneering system keeps animals away from ticks and disease and allows for collection of manure to be used as fertilizer, thus restoring soil fertility.

EVALUATION

The Nakuru Farming Systems Project was evaluated by an independent consultant.

NEW ANIMAL SPECIES

Camels have been introduced to the Maasai Tribespeople of southern Kenya. This land is already heavily grazed, but camels eat what other livestock won't and therefore, don't hurt the environment.

CONTRACT REPRESENTATION

Technoserve, Inc. represents HPI in this country. Their expertise in the field of small holder livestock development is well respected in many African countries.

UGANDA MGII HIGHLIGHTS

PROJECTS

Church of Uganda Livestock Improvement

Busoga Dairy Development Program

Uganda Ministry of Cooperatives/Tororo

Uganda Catholic Secretariat

YWCA

LIVESTOCK DISTRIBUTED

458 Cattle

82 Swine

PASS ON ANIMALS

107 Cattle

25 Swine

NUMBER OF PEOPLE DAYS OF TRAINING: 21,343

CONFERENCES

A one-day country-wide conference on project management and HPI development philosophy was held for all projects.

POLICY IMPACTS

The Ugandan Government, which works well with HPI, is basing its small-holder dairy development program on the HPI zero grazing model.

EFFECT OF CIVIL WAR

A project in the Tororo area surpassed its targeted goals until the Ugandan civil war moved into the area in mid-1987. Most of the project participants were forced to flee from their homes, and 33 HPI animals were stolen. This project is now on hold as the Tororo area is still considered unsafe.

EFFECTS ON FARMERS

Farmers' increased milk production has raised their incomes 200-300%. The average HPI farmer's income is 4 to 5 times the average salary of a government worker. Many more good proposals are being received than HPI can fund.

EVALUATION

A mid-project evaluation of the YWCA Project by an independent consultant was completed. The Busoga Dairy Project was evaluated by an independent veterinarian.

ZIMBABWE MGII HIGHLIGHTS

PROJECTS

Chicore Farm Dairy

Nyagadza/Craigmore Dairy

Manyika Livestock Project

Zvataifarira Cattle Breeding Project

LIVESTOCK DISTRIBUTED

96 Cattle
43 Swine

PASS ON ANIMALS

19 Cattle
55 Swine

NUMBER OF PEOPLE DAYS OF TRAINING: 4,068

CONFERENCES

A Project Holders' Conference was held in 1987. Participants were trained in project administration.

ACTION RESEARCH PROJECT

The introduction of improved pasture species has been tested, as well as various feed mixtures for pigs.

GOVERNMENT COOPERATION

The Zimbabwe Government has offered its support to livestock projects in areas in which HPI has pioneered projects.

EVALUATION

A HPI/USAID Mid -Term Evaluation was completed in 1987. Recommendations were put into effect in 1987 and 1988.

DROUGHT

Zimbabwe suffered from a severe drought from 1985 until early 1988. The HPI training in animal husbandry helped the farmers to save most of their animals.

CONTRACT REPRESENTATION

A contract for representation was signed with Christian Care, thus solidifying HPI's position in Zimbabwe.

EMPHASIS ON WOMEN

Three of the four Zimbabwe programs target the widows of the Zimbabwe War of Independence and their families.

COOPERATING AGENCIES

Christian Care and the United Church of Christ jointly renewed the Chikore Project.

**ZAMBIA
MGII HIGHLIGHTS**

PROJECTS

Chisha Mwamba's Village Livestock
Malcolm Moffatt Teachers' College
Nashinga Cattle Community Project
Boys' Brigade Livestock Project
Twafwane Oxen Project

LIVESTOCK DISTRIBUTED

165 Cattle
9 Sheep
52 Goats
10 Rabbits

PASS ON ANIMALS

1 Sheep

Most animals are kept at training center.

NUMBER OF PEOPLE DAYS OF TRAINING: Most training takes place at training centers and occurs on a daily basis.

TECHNOLOGY TRANSFER

The use of oxen for draft power is being introduced as an alternative to tractors which are costly and unreliable. This method is quickly being adopted throughout the surrounding communities.

CONFERENCES

HPI was instrumental in organizing a three-day national conference on oxenization attended by HPI representatives, University representatives and other PVO staff.

CONTRACT REPRESENTATION

A contract for representation was signed with Christian Council of Zambia in 1987.

TRAINING ACTIVITIES

Over 485 youth are being trained to use oxen in an ongoing training course. Upon completion each group is provided a team of oxen. Because of the interest in the program expressed by adults, 425 adults have also been trained.

GOAT HUSBANDRY TRAINING

In the Malcolm Moffatt Project, 46 goats have been supplied to a teachers' college for training students in practical animal care. The goats are crossbred with local animals to improve the local breed and pass-on animals from the school's herd are distributed to local farmers.