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Taking Women Into Account:

Lessons Learned from NGO Project Experiences

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Introduction

Rekha Mehra

During the past decade, there has been a growing interest among non-governmental organizations (NGOs) in reaching women more effectively through their field-based programs in developing countries. The International Center for Research on Women (ICRW), as a member of InterAction, an umbrella organization of 160 U.S. NGOs engaged in international relief and development assistance, was well-positioned to observe this growing interest.

While some NGOs had already developed experience and expertise in integrating women into their programs during this decade, others seemed much less certain about the measures needed to turn this interest into reality within their own institutional settings. ICRW, therefore, became interested in compiling guidelines that would help meet this need.

In 1993, InterAction, with ICRW's active participation, created a Commission on the Advancement of Women (CAW) to support members' efforts to better integrate women into their field activities. The creation of CAW provided ICRW with an opportune time to work with InterAction members to make their programs more responsive to women's needs and concerns, and to involve women more effectively.

Thus, in 1994, ICRW, in collaboration with InterAction and CAW, undertook a series of four case studies of the field-based projects of U.S. NGOs that offered replicable lessons learned in working with women.[1]

Objectives

In addition to highlighting the experiences of U.S. NGOs in integrating women and gender concerns into their development activities, the objectives of the project were:

- to glean practical and replicable lessons learned from these case studies that would be instructive and useful to the larger community of U.S. NGOs interested in improving their responsiveness to women and gender concerns;
- to make the lessons learned available to a wide range of NGOs, donors, women's organizations, and others interested in enhancing the impacts of field-based projects by taking women and gender concerns into account; and
- to present the information obtained from the case studies for comment and discussion at the Fourth UN World Conference on Women held in Beijing in September 1995.

Case Study Selection

Projects were selected through a competitive process from self-nominations made by members of InterAction, based on their innovative responses or strategies for addressing women's needs and concerns, and on their sustainability and replicability. Selection criteria for the projects were that women were both participants and beneficiaries; women's needs, contributions, and constraints were taken into account; and the lessons learned had widespread impact.

The four case studies selected were: the Regional Oils Project of Appropriate Technology International (ATI) in Tanzania and Zimbabwe; the Warmi and Woman-Child Impact (WCI) Projects of Save the Children (SC/B) in Bolivia; WID Initiatives in Agroforestry and Integrated Aquaculture Programs of CARE in Guatemala; and the Northwest Thailand AIDS Awareness Project and Women's Empowerment Project of the Chiangmai Provincial Centre for Non-Formal Education (CNE) and Laubach Literacy International in Thailand.

The studies reflected the regional and sectoral diversity among U.S. NGOs engaged in international work and, as such, promised to yield lessons learned that would be widely applicable across a range of organizations. Regional and sectoral diversity offered insights into a variety of field activities—multisectoral maternal and child health, literacy, and credit in Bolivia (SC); natural resource management in Guatemala (CARE); small-enterprise development in Tanzania and Zimbabwe (ATI); and AIDS prevention and women's empowerment in Thailand (Laubach/CNE). The projects ranged

[1] Funding was provided by the Office of Women in Development of the United States Agency for International Development through an agreement with InterAction's Commission on the Advancement of Women.

from those seeking to have a large-scale, national or regionwide impact such as ATI's Regional Oils and SC/B's Warmi and WCI, to the smaller-scale village level demonstration impacts of the Women's Empowerment Project of CNE.

The projects selected also reflected a variety of relationships between the U.S.-based NGOs and the counterpart agencies in the developing country. Thus, Save the Children and CARE worked through their own field-based organizations in Bolivia and Guatemala, respectively, albeit with the cooperation of appropriate government counterpart agencies. ATI and Laubach worked through indigenous partners which were primarily responsible for implementing the projects—in ATI's case with substantial financial and technical input, and in Laubach's case by providing small amounts of unrestricted funds to organizations like the CNE that it considers are doing good work to use as they will.

The Warmi and WCI projects of SC/B targeted mainly women, and the AIDS project of CNE explicity included both women and men. The two other projects, although they did not exclude women, did not initially put much emphasis on women until a few years into the projects.

Lessons Learned Across Projects

Although we set out to look for lessons learned from success stories, we discovered that a great deal could be learned as well from omissions and shortcomings. What follows, therefore, are findings and conclusions that may not always appear successful but are consistently instructive and, therefore, invaluable. The main lessons learned are as follows:

- *Project designs that take account of poor women's significant economic roles and responsibilities, assign economic value to women's time, and build on women's on-going activities and skills, are more likely to succeed.*

One striking finding of the case study research was the importance that women themselves assign to their economic work and to meeting their economic needs. Except for the oilprocessing projects, the cases examined herein were not initially designed to address women's productive needs. Rather, they had as their goals improvements in women's reproductive health and in resource management. But, because they worked very closely with client communities and employed participatory techniques, project staff very soon discovered that economic survival was a key priority for their women clients. Fortunately, once project staff became aware of women's economic needs, they attempted to be responsive. SC/B, for instance, introduced the WCI Project to complement its health work by also addressing women's credit and educational needs.

The case studies also showed that the failure to view women as economic producers undermined project success. For instance, in Bolivia, because women were not offered agricultural extension services, they were not able to make profitable use of credit. Many women could not recoup their investments in livestock because they did not have access to services that could have helped their sick animals recover. This was true as well in Guatemala where women were not initially brought into the agroforestry projects.

Conversely, projects that took account of women's economic needs and sought to improve their economic opportunities, generated women's interest and participation. The case studies showed that projects designed to build on women's on-going economic activities, and to take account of women's skills and experience, were likely to be more effective and sustainable.

Finally, another important lesson was that the time costs of women's involvement in projects is high and, therefore, women give greater priority to activities that promise immediate and tangible economic returns rather

than long-term intangible ones. They were, thus, more inclined to adopt livestock and vegetable gardening in Guatemala, and only willing to attend literacy classes in Bolivia during their leisure time. This is consistent with the findings of many research studies that show that poor women have multiple productive and reproductive responsibilities, work very long hours, generally longer than men, and have little leisure time.

Assigning economic value to women's time can help guide the selection of appropriate project designs and activities and avoid pitfalls such as scheduling training or demonstration activities at times that conflict with women's work. Because of their time constraints, women are unlikely to sustain interest in activities that they may consider "wasteful" of their time.

- *Providing access to credit responds to a real need among poor women.*

Through their small-scale specialized credit programs, U.S.-based NGOs can play an important role in enabling women who have never before had loans to establish credit histories. They can also help women acquire experience in becoming borrowers, and ready them to become clients of the growing number of specialized microfinance institutions (and a few commercial banks) in developing countries that can better meet the long-term needs of a very large and growing clientele among the poor.

Because meeting their survival needs is so important to poor women and because they have such limited access to productive resources and skill training, they have a high demand for credit to enable them either to start micro-enterprises or to make their on-going enterprises more productive. Three of the four projects examined provided credit, either because women themselves asked for it or, as in the case of the Regional Oils Program, because project staff determined that it was needed to promote press purchases among women. None of the NGOs were particularly experienced in the field of microfinance or credit but, in the interest of being responsive to the needs of their clientele, they willingly undertook credit delivery. Their credit interventions, therefore, were small and carefully tailored to the needs of their own programs.

The credit programs were successful in meeting their somewhat limited objectives. They had good recovery rates on loans. They also seemed to make a real difference to their clients—whether in improving oilpress sales among women in Tanzania and Zimbabwe, or in enabling them to expand their small income-generating enterprises in Guatemala.

But because the credit programs were so specialized, they were unable to meet the more broadbased credit needs among women. The specialized credit provided by Regional Oils to purchase presses, for instance, was not sufficient to meet women's needs for working capital to keep their enterprises afloat. Also, it was unlikely that these credit programs could be sustainable in the longer term. SC/B, for example, did not try to ensure that its costs of delivering credit were covered—a necessary condition for long-term sustainability in credit programs.

Fortunately, the rapid expansion of highly specialized, efficient, and successful microfinance institutions in many developing countries offers a practical alternative for improving women's access to credit and complementing the work of NGOs. In fact, SC/B was attempting to establish linkages with national microfinance agencies such as PRODEM, an NGO, and Banco Sol, a commercial bank to which it could "graduate" its clients.

These findings suggest it may not be appropriate for NGOs to establish microfinance operations themselves. Neither is it necessary because, in many countries, it is possible to tap into more specialized institutions that provide microfinancial services. NGOs, however, can play a very useful role in identifying women clients

and, through their specialized programs, enabling women to establish credit histories and to acquire experience in obtaining and repaying loans.

- *In addition to credit, women need complementary services, such as new technology, training, and extension services, for their enterprises to grow and become more profitable.*

Because poor women have limited access to education and training, complementary services are needed to enable them to improve their productivity whether in agriculture or micro- and small-enterprises. They need access to new technologies, training, and extension services in agriculture. Women engaged in microenterprises and trade need training and technical assistance related to business development.

- *Participatory techniques, properly implemented, can be very effective in building community support for a wide range of development activities.*

Such techniques may be particularly effective in involving women, garnering male support, and in ensuring that both men and women receive the same message when this is necessary, as it is in delivering AIDS prevention messages. However, it is not enough to simply mobilize poor communities. Community members also need improved access to the larger network of resources and support services available outside their communities.

The case studies showed that participatory techniques were very effective in identifying community needs. For instance, the participatory diagnostic and needs assessment exercises conducted by SC/B in Bolivia and CARE in Guatemala revealed that what women really want is assistance in meeting their economic needs through income-earning opportunities and access to credit. Once community needs have been identified, institutions offering assistance must be willing to provide the resources and services required, even if it means reordering their priorities.

Participatory techniques were also very effective in delivering CNE's AIDS prevention messages. Although it was not possible to evaluate the long-term impact of these strategies, because of the project's short duration, they proved effective in opening up communication about what is, in most cultures and for most people, a particularly difficult topic--namely, sexual behavior. The use of techniques appropriate for and targeted to women, men, and children, helped raise HIV/AIDS awareness among each of these groups. The techniques were also successful in recruiting volunteers to carry on the work after the initial awareness-raising and prevention activities led by project staff had been completed.

- *It is both strategic and practical to involve men, along with women, in community-based development projects.*

Whether projects that aim to meet women's productive and reproductive needs should involve women only or both women and men must be a decision based on local needs and socio-cultural norms. However, because women are often constrained by those norms and expectations that limit their actions and decision-making, involving men in the process often enhances the benefits women and their families accrue from these projects.

Among the four projects, it was often the case that involving men, even in women-focused activities, contributed to the ultimate success of the projects. In the case of the Zimbabwe Oilseeds Processing Project, it was only after the husbands of women press owners were informed of the project, its activities, and the benefits their wives and families would receive from their participation did the husbands allow their wives to become fully engaged in project-related meetings and other activities. In the case of the

Thailand AIDS Awareness Project, providing information to mixed-sex groups ensured that both partners were receiving the same information at the same time; while single-sex groups provided an opportunity for women and men separately to raise sensitive questions and issues.

Single-sex groups and activities may also be needed at discrete stages of project development to ensure that women have continuous opportunity to articulate their needs and concerns, particularly as these needs and concerns may change. The need for women-only forums has to be determined in the project context.

- *A WID component added to an on-going project can be very effective in enhancing women's participation.*

Research has shown that WID components, if properly implemented and well-funded, can be very effective in enhancing women's participation in projects and in enabling women to benefit from the projects. This was true of the oilseeds projects and of the WID initiative in CARE's agroforestry program in Guatemala. Such projects can have an important demonstration effect, and lessons can be instructive not only for the project itself but for the implementing institution as well. Problems arise, however, in determining the appropriate time to "mainstream" the WID component, and the tendency is to err on the side of mainstreaming too fast. Broadly speaking, the appropriate time to mainstream and still ensure the long-term sustainability of WID components is when institutional commitment to WID is widespread throughout an organization, and staff and counterparts are dedicated to WID efforts and skilled in technical skills related to integrating women into all activities.

Making Oilseed Presses Work for Women: ATI's Projects in Tanzania and Zimbabwe

Charlotte Johnson-Welch
and Daniel Whelan

Sarah is a widow and mother who operates her own oil press business in two sites outside Harare. She bought her first press in 1992, using her own funds; she got the second press two months later. With the income generated from these presses, she bought two more presses and hired local workers to operate the presses for her. Although she has difficulty accessing adequate supplies of seeds to keep her presses operating year-round, she has produced and sold enough oil such that she could expand her business, earn a salary, and pay school fees for her children. Her business success led to her being elected president of ROMA, a member organization of press owners, and while her success has not been without some problems, including harassment from male shop owners who felt she was competing with them for clientele and the heavy demands ROMA placed on her, Sarah is an example of a successful woman-owned and -managed enterprise.

The case of Sarah is illustrative of what can happen when a development agency supports a technology which meets local needs and is accessible to women. Founded in 1976, Appropriate Technology International (ATI) is a nonprofit organization, based in Washington, D.C., whose mandate is to test and validate "innovative and creative" interventions that enhance business opportunities for small producers, such as Sarah, in critical economic subsectors such as dairy, oilseeds, and non-timber forest products (ATI 1994). Since 1978, ATI has worked in partnership with 300 local institutions in 40 countries on a wide range of enterprise development projects. One of its leading efforts in Africa has been to increase access to affordable cooking oil at the local level by promoting the development of an affordable, easy-to-use oilseed pressing technology--the ram press--and the establishment of small-scale enterprises based on this technology in a number of countries. The project started first in Tanzania and Zimbabwe during the 1980s. By 1991, the Regional Oils Project was created to provide a regional capability for project expansion into a number of other countries throughout Africa.

Because women are traditionally responsible for processing oilseeds for household consumption--an often laborious and time-consuming task--a key feature of the ATI-supported project was to ensure that women had access to the new technology, thereby making this household task easier and providing an income-earning opportunity. This case study documents ATI's role in supporting two projects--the Village Oil Press Project (VOPP) in Tanzania and the Zimbabwe Oil Press Project (ZOPP)--that developed and disseminated the ram press technology in those two countries. It focuses on the approaches used to ensure women's participation, evaluates the relative success of these efforts, and derives lessons learned that are replicable and sustainable.

The Economic Settings

With a per capita annual income of US$100, Tanzania currently ranks among the poorest nations in the world. International Labor Organization statistics indicate that more than 84 percent of the country's workers were employed in the agricultural sector in 1990-1991 (World Bank 1993). Unlike most other countries in sub-Saharan Africa, in which the share of agriculture in the overall economy has been declining, Tanzania's agricultural sector increased its share of gross domestic product (GDP) from 54 percent in 1980 to 61 percent in 1991. Meanwhile, the share of both services and industry has fallen off. Services' share of GDP declined from 42 percent in 1970 to 34 percent in 1991, while industry's share fell from 17

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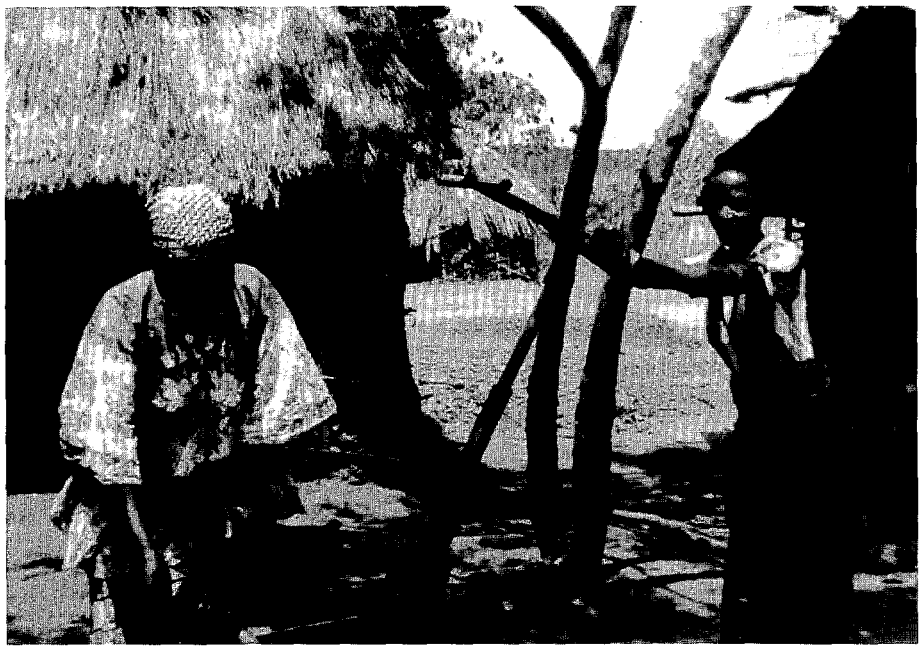


In Tanzania, where women are traditionally responsible for processing oilseeds, the new oilseed press made this household task easier and more efficient.

percent to 5 percent in the same period (United Nations 1991; World Bank 1993). During the 1980s, exports declined on average by 2 percent annually, while imports increased on average by nearly 3 percent.

Tanzania's reliance on food and fuel imports has increased while imports of machinery, equipment, and manufactured goods have declined. In 1970, for instance, machinery, transport equipment, and other manufactured goods comprised more than 80 percent of all imports. By 1990, they represented just 66 percent of all imports, while 84 percent of imports were primary commodities such as food and live animals, animal and vegetable oils, and fats (World Bank 1993). Tanzania is also currently one of the most indebted countries in sub-Saharan Africa; in 1990, its external debt stood at US$5.8 billion. Almost one-fourth of the country's export revenue was used to service its external debt in 1991.

Income distribution in Tanzania is very unequal. In 1991, 63 percent of GDP accrued to the highest quintile (top 20 percent) of the population, whereas only 2 percent of GDP accrued to the bottom quintile of the population (World Bank 1993).

Tanzania's economic stagnation is partly reflective of the generally sluggish conditions that have dominated sub-Saharan Africa during the last decade. Additional factors are unfavorable global economic conditions during the 1980s, such as falling commodity prices which undermined the export sector, and demand-reduction measures associated with the adoption of structural adjustment policies during the late 1980s. As total economic activity fell from 53 percent in 1970 to 47 percent in 1990, women's economic activity as a percentage of male activity dropped from over 100 percent in 1970 to 92 percent in 1990 (United Nations 1991).

These same macro-level events have impacted directly on women's social status and their participation in the economy. Primary school enrollment rates have dropped from near universal enrollment at the first level in 1990, and girls are more likely than boys to be kept out of school to supplement unpaid household labor (Mbilinyi 1993). With fewer available health services, women are more susceptible to disease and malnutrition. In just one year, between 1990 and 1991, maternal mortality increased from 190 deaths to 215 deaths per 100,000 live births (Mbilinyi 1993) This is in stark contrast to earlier gains in key social indicators for women. Female life expectancy increased from 48.2 years in 1970 to 52.3 years in 1990, while illiteracy among women dropped dramatically from 85 percent to 12 percent (WISTAT 1991).

By contrast, Zimbabwe's economy is relatively advanced compared to Tanzania and to other countries in sub-Saharan Africa. In 1991, per capita GNP was US$650, the third highest for all low-income economies (World Bank 1993). Zimbabwe is one of the most industrialized countries in sub-Saharan Africa, with industry contributing 32 percent to GDP in 1991. While this share has declined somewhat in recent years, falling from 36 percent in 1970 to 32 percent in 1991, the share of manufacturing, typically the most dynamic part of the industrial sector, has increased from 21 percent of GDP in 1965 to 26 percent in 1991 (World

Bank 1993). Most industrial production, however, is highly concentrated, with 50 percent of all manufactured items produced by one firm (ATI 1995b).

Agriculture accounted for 71 percent of employment in 1990 and contributed 20 percent to GDP in 1991 (World Bank 1993). Upon achieving independence in 1981, Zimbabwe inherited a skewed land distribution pattern and a dual farming system in which medium- and large-scale commercial farmers and small-scale producers controlled 29 percent of the fertile land, produced both food and non-food crops for local and export markets, generally employed capital and input-intensive techniques, and had better access to government services and public and private sector credit. Conversely, 60 percent of the population, including communal or small farmers (50 percent of whom were women) had access to relatively unproductive lands, used their own or family members' labor for production, employed simple, often labor-intensive technologies, and had access to fewer inputs (CIDA 1992; ATI 1995b). This configuration has not changed significantly during subsequent years and 70 percent of the labor force is still engaged in the agriculture sector (ATI 1995b).

Until recently, the commercial agricultural sector of Zimbabwe was highly regulated. Crop marketing boards or parastatals dominated agricultural marketing and the government set prices for most farm products. However, since October 1990, the adoption of a structural adjustment program has eliminated most agricultural crop marketing boards and removed many price controls.

Although Zimbabwe has increased its debt burden during the last decade, in 1991 total external debt constituted about 51 percent of GNP, a ratio that is much more favorable than in most other low-income countries. In 1991, total debt services comprised 27 percent of all exports (World Bank 1993; UNDP 1994). Unemployment is, however, a serious problem. In 1992, one-fourth of the labor force was unemployed. It is estimated, moreover, that in 1991 just 12 percent of workers were employed in the formal sector (ATI 1995b), which continues to shrink such that the formal sector now represents only 35 percent of all economic activity (CIDA 1992).

While women are active participants in Zimbabwe's economy, most of their activities are concentrated in the informal sector. During the 1980s, about 70 percent of rural women and 40 percent of urban women were employed in the informal sector, compared with just 25 percent in the formal sector which, in 1982, constituted about half of the overall economy. The economic recession of the 1980s has had a significant impact on the economy and women's participation in it. Female economic activity as a percentage of male economic activity has declined, from 60 percent in 1970 to 53 percent in 1990 (United Nations 1991). Moreover, approximately 70 to 90 percent of all agricultural labor, whether paid or unpaid, is provided by women (CIDA 1992).

In 1992 a lighter, smaller press was developed that was even easier for women and children to use.

A brighter picture exists for women's health and educational status. Life expectancy among women increased between 1970 and 1990, from 53.3 years to 57.3 years, while maternal mortality dropped from 483 deaths per 100,000 in 1980 to 90 in 1990. Women's access to education also improved although a gender gap persists. In 1982, women accounted for only 25 percent of the students at the University of Zimbabwe (CIDA 1992). By 1989, women comprised about 36 percent of students at the university level throughout Zimbabwe (WISTAT 1994).

Oilseeds, Oil, and the Need for Intervention

Oilseeds and oil are produced both at home and commercially in Tanzania and Zimbabwe. Potential demand for these products is high because they are so vital for human nutrition. Not only is dietary fat necessary for meeting human energy needs, it is also needed to enhance absorption of fat-soluble vitamins, such as vitamin A, which is particularly important for growth and development, especially in children. The World Health Organization (WHO) recommends a per capita intake of 25 grams of fat daily. Although exact figures for Tanzania and Zimbabwe are not available, it is estimated that in tropical Africa per capita consumption of oil and fats is 5.1 kg per year, the equivalent of 14 grams per day--well below the WHO recommended level (ATI 1995c). Moreover, seedcake—a byproduct of oilseed pressing— is also highly nutritious animal feed and is in high demand by livestock owners.

Traditionally, rural households obtained cooking oil either by pressing it themselves from seeds they grow or by purchasing it. Home production was a labor and time intensive process and was performed principally by women and children. As shown in table 1, current needs for food oil cannot be met with domestic production alone. Cooking oil availability is often a problem, particularly in rural areas. Demand, moreover, is projected to grow substantially. Estimates for Tanzania show that by the year 2000, production will have to increase by 400 percent, to a minimum of 237,000 tons per year, for the population to attain a nutritionally balanced diet (ATI 1995a).

In the 1980s, when ATI became interested in supporting oil production in Tanzania, oilseed and oil production had fallen significantly mainly due to declining economic conditions and a skewed incentive structure. Farm trade was regulated by the government, which set the purchase price of commodities. Farmers were required to sell their output to publicly-owned agricultural trading organizations, known as parastatals, at government-set prices that often were lower than market prices.

In addition, as the government became increasingly unable to finance parastatal purchases, farmer incentives to grow oilseeds declined even further. This eventually led to a crisis in cooking oil availability which was further exacerbated by government exports of unrefined oil and restrictions on oil imports. As a result, there was virtually no cooking oil in Tanzania, except that produced at the household level. By 1986, although Tanzania had started to liberalize its trade policies and had begun to import palm oil and shortening that alleviated the shortages in urban areas, supply problems persisted in the rural areas (Hyman 1993).

Conditions in Zimbabwe were, in some ways, quite similar to Tanzania. After independence in 1981, while Zimbabwe's economic performance was quite good by sub-Saharan African standards, it was constrained by its heavy reliance on parastatals and collectives, and rigid centralized controls. Public sector expenditures were as high as 53 percent of the GDP and the external debt/GDP ratio had reached nearly

Table 1 Tanzanian Oilseed Sub-sector

Total Consumption of Oils in late 1980s	45,000 tons/year
Projected Consumption by 2000	237,000 tons/year
Domestic Production	
Commercial Sector	8,500 tons/year
Home Production	8,500 tons/year

Source: ATI, 1995a.

60 percent, effectively squeezing out the private sector. Industrial production was highly concentrated and 50 percent of the 7,000 items manufactured locally were produced by a single firm (ATI 1995b).

In October 1990, Zimbabwe introduced an economic structural adjustment program designed to liberalize the economy. Agricultural marketing boards were eliminated, except the Grain Marketing Board, which was transformed into a registered corporation. Price controls on sunflowers and other oilseed plants were removed. As many as 45,000 jobs in the formal sector were eliminated and the need to vitalize the informal sector and build on indigenous enterprises became more urgent (ATI 1995b).

Zimbabwe also imports a significant portion of edible oils. Until recently, the Grain Marketing Board exercised a virtual monopoly over the sale of sunflower seeds and groundnuts. However, to date, private traders and large oilseed processors are free to purchase seed from any source. Table 2 illustrates the recent changes in importation of edible oil in Zimbabwe.

Despite economic changes in Zimbabwe, the country has a relatively good system of roads and communication. As a result, distribution of edible oil in rural areas is not difficult, and the effective demand for the oil is strong enough that rural producers obtain almost the same price as large-scale producers.

Table 2 Edible Oil Imports in Zimbabwe: 1990-1992

Year	Quantity	Value
1990	2,991 tons	$1.545 m
1991	7,642 tons	$4,318 m
1992	2,500 tons*	$15.4 m

*Drought year
Source: ATI 1995b.

The Village Oil Production Project (VOPP)

The Village Oil Production Project (VOPP) in Tanzania was born of the need to increase cooking oil availability, particularly in rural areas. During the 1980s, the Institute for Production Innovation (IPI) at the University of Tanzania developed a more efficient oil press for domestic use to replace labor intensive and time-consuming traditional processing methods, and to improve the low extraction rates and yields achieved by using the traditional method (Hyman 1993). The IPI press was an improvement over traditional methods, but still was not suitable for household use because it was expensive to buy and cumbersome for women to use. This press became the basis for further experimentation by ATI and, in 1985, led to the development of the ram press, which was both less expensive and less bulky than the IPI press. The ram press became the prototype for other similar presses and the basis for the formation of VOPP in Tanzania, and later of ZOPP in Zimbabwe.

The first press to be widely disseminated in Tanzania was a variation of the ram press designed by the Craftsmen and Artisans Production Unit (CAPU), and was known as the CAPU press. Refinement on this design continued because it was not yet considered cheap or easy enough to manufacture and use, particularly by women. In 1992, a lighter, smaller press was developed that was even more efficient, affordable, and easier for women and older children to use.

Not long after the development of the ram press, ATI joined hands with Lutheran World Relief to produce and disseminate the oilseed press in and around Arusha, Tanzania. The objectives of the Village Sunflower Project (1985-1989), as it was known, were to support the establishment of 40 small-scale oil pressing enterprises in at least 32 villages. By 1989, the success of the project prompted ATI, in partnership with Tanzania's Small Industry Development Organization (SIDO), a government agency, to undertake a five-year follow-on project, the Village Oil Press Project (VOPP). ATI provided a substantial percentage of the funding and technical assistance to VOPP. VOPP also received financial support from a number of other organizations, such as Lutheran World Relief, the Canadian International Development

Agency (CIDA), and the Office of Women in Development of the U.S. Agency for International Development (USAID/WID). The project was based in Arusha and implemented throughout the country.

VOPP's goals were to establish and promote village oil production units throughout Tanzania; to develop local manufacturing capability of ram presses; to work with local and national organizations in Tanzania to promote use of the ram press among sunflower producers; and to give special emphasis to establishing oil production units that were owned and operated by women. To increase women's access to the press, VOPP (through SIDO) used funds provided by USAID/WID in 1990 to establish a loan-purchase mechanism which enabled buyers to buy presses with a 50 percent down payment and the promise of repaying the balance within six months.

The project charged no interest or service fees and loans were available to both men and women, although women were given priority. About 11 percent of all presses sold by VOPP until 1994 were financed through this credit mechanism. A 1994 evaluation of VOPP documented a repayment rate of nearly 100 percent. The excellent repayment rate was partially due to the threat of repossessions and forfeiture of the 50 percent down payment (Macpherson 1994). Also, VOPP tended to be lenient regarding repayment during difficult times, such as when a drought or other natural disaster reduced oilseed output. This leniency facilitated eventual repayments.

VOPP also promoted the planting and use of a soft-shelled variety of sunflower seed known as the "Record," which contained more oil and caused less wear and tear on the press than harder seeds. It was also cheaper for farmers to plant because it was an open-pollinating variety, reducing the need to purchase planting seeds every year. Nevertheless, problems were encountered in maintaining the sustainability of this seed variety (see"Outstanding Challenges," p. 21).

Project activities involved all aspects of producing the press and promoting its use. Staff trained press buyers in press operations and maintenance of the presses and, later on, assisted with maintaining and developing small businesses. In 1994, a pilot business training program was initiated with highly-motivated, better-educated women. Staff also administered and operated the loan-purchase program and trained press manufacturers in production techniques and quality controls. By December 1993, there were seven ram press manufacturers in five regions of Tanzania, including both public sector manufacturers (e.g., CAMARTEC in Arusha) and privately-owned enterprises, such as Themi Engineering and Azimio Engineering.

The project was implemented by four field managers--two men and two women. The women--one assigned from the Tanzanian Ministry of Agriculture and the second hired with funds from USAID/WID--began working with the project in 1992 and 1993, respectively. VOPP hoped the women managers would have a demonstration effect and, by encouraging women to feel more comfortable with the press, would stimulate sales among them. The women field managers also were charged with urging women to develop their own small-scale businesses.

Each manager, trained on the job by other project staff, was assigned responsibility for one to two "action zones" in Tanzania. A new or revised set of zones was drawn up every year, based on oilseed production statistics, with high-yield zones being especially targeted for press promotion and sales in the following season. Managers lived in or near their zones and, typically, went to the Arusha project base office only on an occasional basis.

This decentralization of field operations contrasts with that of ZOPP operations, which will be discussed below. Each field manager worked somewhat independently of the others, with minimal interaction and supervision. This was primarily a result of the large areas each covered, and the poor transportation infrastruc-

ture in Tanzania. This relative isolation worked to the benefit of the project in many ways. Because field managers had the liberty to develop solutions to operational problems they identified in their zones, problem solving became a dynamic and innovative process that quickly responded to local issues and concerns, particularly those of women.

Repair and maintenance difficulties were originally the responsibility of the field managers. However, recognizing the need to reduce this dependency on project-support agents, in 1994, staff began to train a cadre of rural artisans in repair and maintenance to replace staff's provision of these services. VOPP managers, however, continued to provide these services until adequate numbers of artisans could be trained to meet current and future needs.

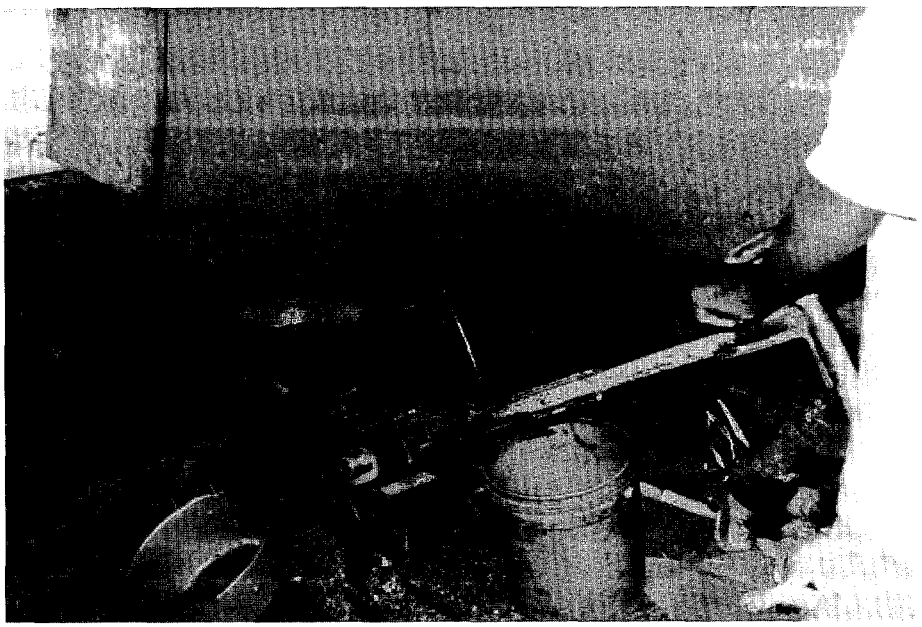
By 1994, a total of 1,371 ram press enterprises had been established in more than 1,000 Tanzanian villages. In addition, other organizations outside Tanzania, such as CARITAS, Food for the Hungry International, and CARE, had purchased 76 presses. Combining these sales with those in Tanzania, VOPP had sold a total of 1,447 oilseed presses by 1994.

The Zimbabwe Oil Press Project

The Zimbabwe Oil Press Project (ZOPP) was established in August 1989. It evolved from an earlier pilot ram press promotion project started in 1986 by a volunteer from World University Service of Canada (WUSC) with the participation of ATI. ZOPP was formed to expand the pilot project. It was funded by ATI and, by 1994, had attracted additional funding from the Canadian International Development Agency (CIDA), Africa Now (a British NGO), and the Food Industry Campaign Against Hunger (FICAH). ATI's funding commitment of $175,000 was the largest and represented about 35 percent of the total project allocation of just over $500,000. This contribution excludes other ATI contributions, such as technical assistance and training supported by non-project funds.

The objectives of ZOPP are similar to those of VOPP: to establish local manufacturing capability for the ram press; increase availability of cooking oil; and support the development of viable small-scale enterprises for press manufacturers, owners and oil producers, and service providers. ZOPP offered its clients two press options--the CAMARTEC press developed in Tanzania and, in 1993, the Herz, an adaptation of the CAPU press developed by an ATI consultant. The Herz Press was 20 to 25 percent less costly to produce than the CAMARTEC, had a larger production capacity, but was still compact enough to be used by all community members, including women.

ZOPP's role in stimulating the local manufacture of presses was to provide training and technical assistance to existing metal workshops. It has relied primarily on small-scale manufacturers who are able to produce at lower cost than larger manufacturers, but who require more technical assistance and monitoring. Because some of the earlier presses produced in Zimbabwe did not work well, ZOPP attempted to ensure quality control by standardizing the manufacturing process and awarding a serial number and registration under the trade name *Zopper* to presses produced under the approved



The flat tin at the end of the press catches the oil, while seedcake is collected in another tin.

Table 3 Cash and Credit Sales of the CAPU and CAMARTEC Presses to Women and Men, January-October 1994

	CAPU Press		CAMARTEC Press		Total Sales	
	Cash	Credit	Cash	Credit	Cash	Credit
Women	16	16	14	14	30	30
Men	42	36	84	22	126	58
Total	**58**	**52**	**98**	**36**	**156**	**88**

Source: ZOPP, 1994a

system. By mid-1994, there were four "authorized" producers of the ram press, all based in Harare, and ZOPP is continuing its efforts to increase the number of press manufacturers.

As in Tanzania, ZOPP field staff--all men--were also involved in promoting and marketing the press, promoting the cultivation of sunflowers, repairing and maintaining the presses, providing credit to buyers, and operating a revolving loan fund to help artisans purchase tools and machinery needed for maintaining and repairing the presses.

Because of the better transportation infrastructure in Zimbabwe, ZOPP field staff, unlike VOPP staff, worked out of Harare and traveled to their target zones. This permitted ZOPP staff greater interaction and collaboration among themselves, unlike the situation with VOPP, where the lack of centralization led to a different positive outcome, namely staff innovation in the field.

ZOPP, like VOPP, provides credit for press purchase. ZOPP has two credit plans--one for women only (supported by CIDA), and one for women and men with priority given to women (supported by funds from ATI). Both require a down payment of 50 percent of the price of the press with an interest charge of 35 percent on the balance due over the life of the loan. Recently, ZOPP also began to offer a discounted purchase price for those who could pay in cash. Altogether, 650 presses have been sold in Zimbabwe. Table 3 shows sales figures from January to October 1994, and demonstrates that women are more likely than men to use the credit facility as a percentage of their total purchases. Men's use of the credit plan has fallen off significantly with the advent of the discounted cash purchase price, as a result of which overall sales grew 140 percent in 1994 (ZOPP November 1994).

ZOPP also promoted a particular sunflower variety for use with the press, as VOPP had. Rather than promoting an open-pollinating variety, however, ZOPP encouraged production of a hybrid seed that contained close to 20 percent more oil than the open-pollinating seeds and was soft-shelled. Although this variety costs more to produce than the "Record" variety, because farmers must buy new planting seed every year, ZOPP believed the costs were offset by the greater yields and higher oil content. There were, however, many difficulties encountered by seed-buying press owners in Zimbabwe.

Seed availability is a problem for press-owners in Zimbabwe, as it is in Tanzania. Small-scale producers compete with the large oil manufacturers and with parastatals for the oilseeds which are produced by just a few farmers. Small-scale producers are at a disadvantage both in terms of physical access--they cannot easily get to the seed producers--and because of limited financial capability, which constrains their ability to buy seeds in bulk. Although the parastatals may make pressing seeds available later in the year, it is at a higher price than the small-scale producers are able to pay. Finally, a fungus infestation in 1994, which caused the Zimbabwe government to condemn all oilseed plants, contributed to a reduction in the availability of pressing seeds.

ZOPP is working with the government agricultural extension services and with the large scale seed farms to increase production of appropriate oilseed varieties for small-scale producers. In order to address the seed acquisition and other problems encountered by a growing number of press owners, in 1993 ZOPP, with support from the Canadian-based Intermediate Technology Development Group (ITDG), helped form the Rural Oil Manufacturers

Association (ROMA), a membership organization for press owners. One of the measures proposed by ROMA to resolve the seed availability problem is to explore options for cash-short entrepreneurs--women especially--to buy seed in bulk either by pooling their resources or negotiating loans with commercial and public sector lenders. ROMA also is investigating means to establish its own credit system, independent of ZOPP, for press owners. By 1994, 75 percent of ROMA's 68 members were women, including its president.

Mechanisms for Enhancing Women's Participation

Both VOPP and ZOPP have attempted to involve women as well as men in owning and operating presses. There are compelling reasons for doing so, not only because women are traditionally responsible for processing oil for household consumption, but also because they are active in the economies of both countries, particularly in farm production. In addition, recessionary economic conditions have taken a severe toll on women's employment and on their health and nutrition, reinforcing the need for access to the employment and income-earning opportunities provided through this project.

In both countries, three main factors were instrumental in bringing women into the enterprise of buying and operating ram presses:

- Design changes. As discussed above, smaller, lighter designs were developed that are less difficult to operate and maintain.

- The introduction of credit programs, especially those targeted to potential women press owners. It should be pointed out, however, that women also used alternate mechanisms, other than project financing, to buy presses. Although specific data are not available on the number of women using alternate financing mechanisms, it is known that in some cases husbands provided capital and in other cases women borrowed money from local money lenders. Funding was also available to women from commercial banks and through small loan programs of public and private sector institutions and non-governmental organizations.

- Women field managers. During demonstrations, having women field managers showed that women could use and manipulate the press without assistance.

Consequently, ZOPP, for example, sold 60 presses to women between January and September 1994--roughly one-quarter of all press sales during that period. One-half of the presses purchased by women were financed through the loan-purchase program compared with just 31 percent of sales to men. When discounted sales were introduced in July 1994, women did not shift to cash purchases. They continued to buy presses on credit and their share of purchases remained stable even though total credit sales declined, due to the fact that men reduced buying presses on credit.

By the end of 1994, 40 percent of presses were owned by women (ATI 1995c). However, because of increased economic pressures brought on by the structural adjustment policies, including loss of jobs in the formal sector, more men became interested in purchasing the presses to begin their own enterprises. Unfortunately, the amount of locally-manufactured presses available for purchase was not

Table 4 Oilseed Press Purchases by Type and Gender in Zimbabwe

	Credit Purchases		Cash Purchases		Total Purchases	
Year	Women	Men	Women	Men	Women	Men
1989-90	3	6	0	2	3	8
1991	21	11	0	2	21	13
1992	16	18	6	10	22	28
1993	48	81	19	10	67	91
1994[1]	30	66	33	144	63	210

Source: ZOPP 1994b

[1]Year discounted cash purchase price began.

increasing at a rate to meet the growing demand. This increased competition for the presses might have the effect of making it less accessible to women.

While statistics were not available on the proportion of loans made to women in Tanzania, VOPP staff observed a steady increase in the percentage of women purchasing presses since the loan-purchases program started--from 15 percent of all presses sold in 1992 to 27 percent in 1994.

One important postscript is that, even while making special efforts to reach women more effectively, project staff in both countries were well aware of the cultural norms that limited women's independent involvement in economic activities and, therefore, of the need to keep men informed and involved about their wives' participation in project activities. Project staff could not risk having men perceive the project as being "for women only," as men wanted access to the same economic opportunities as women, and would not want to lose decision-making control in their households. Therefore, the projects promoted press sales as an opportunity for all community members.

Working with Groups

One of the strategies used by VOPP and ZOPP to promote press ownership among women was to work through groups--either pre-existing ones, or those created specifically for an oilpress enterprise.

The idea was to spread the costs and risks of press purchases among group members and thereby facilitate sales among women who would be reluctant to buy presses individually. VOPP and ZOPP preferred to work through pre-existing groups, mostly mixed gender groups such as farming cooperatives, church groups, and entrepreneurial groups. When these were not available, however, they initiated the groups themselves. Although the press projects introduced the idea of group formation, community members organized themselves into groups, and once established, such groups obtained no more support and technical assistance from VOPP and ZOPP than any other groups. In Zimbabwe, only 19 percent of the groups were formed expressly as oilseed enterprise groups, whereas half were pre-existing groups that added oilseed enterprises to their on-going activities (ATI 1995b).

Both VOPP and ZOPP found that the pre-existing women's groups tended to function better than those created specifically for the purpose of purchasing the press. This was because groups organized spontaneously on the basis of self-defined mutual needs and interests were stronger. Also, the pre-existing groups, because they had been around longer, had more time and experience to develop institutionally. Groups initiated by VOPP and ZOPP tended to be less effective, had less cohesion and group affinity, and lost members at a faster rate than the older groups. Nevertheless, in most instances, even these groups served the purpose for which they were designed--they facilitated the process of promoting press acquisitions among women.

An example of a well-organized and successful women's group was one north of Arusha that had 53 members. The group had three main income-generating activities: production of maize meal, pumice, and cooking oil. The business generated sufficient income to enable members to set aside some funds for future operation and maintenance, and to share in the profit. One of the members of this group described how well the sunflower pressing fit into her other activities, and provided a fair amount of supplemental income to the group.

Table 5 Oilseed Press Purchases by Women in Tanzania

Year	# of Presses sold to Women	% of Total Sales[1]
1992	35	15
1993	72	23
1994	98 [2]	27

Source: VOPP Quarterly Report 12/94.

[1]Does not include presses purchased by husbands or other males, or by organizations for women.

[2]Includes 52 to individuals and 46 to women's groups.

She enthusiastically recommended press ownership for other similar groups.[1]

A group in Zimbabwe was illustrative of some of the difficulties and problems facing press owners and entrepreneurs. This group of 20 men and women had bought a press in 1990 and made its last loan payment four years later--a much longer period than others had needed. Their primary difficulty was a shortage of working capital with which to purchase seeds for pressing. In addition, the seeds they did press yielded far less oil and seedcake than anticipated. The group had originally thought that they would earn enough from their enterprise to pay back the loan, purchase a building for their enterprise, and obtain profits. However, all the money they earned was used to pay back the loan, the interest on which eventually totaled almost the price of the press itself because of the prolonged repayment. Consequently, none of the group members had received any return on their investment nor had they accumulated enough capital to finish construction of their building.

A survey conducted by independent consultants for the Zimbabwe project in 1995 (ATI 1995b) found that only half of the groups in their sample reported profits from their oilseed enterprises. The groups reported a mean increase in income per press of $201 per month and a median of $138. With 14 members as a typical group size, this group income would effectively mean $14.36 per member. None of the group members had purchased their own presses as individuals.

The general impression about group ownership was that it met with mixed results, depending especially on whether or not the group was pre-existing. Project-initiated groups had less success overall, despite their usefulness as a mechanism to pool scarce resources such as working capital and time among a group of people that might not otherwise be able to adopt such an enterprise.[2] In fact, while group purchase did allow some women to obtain the technology who otherwise might not have had access to cash or credit, project statistics in Tanzania (see table 5) indicated that the majority of presses were being purchased by individuals rather than groups. How individual and family owners fared is described below.

Individual or Family Ownership

Women who owned their own presses and enterprises individually generally tended to be better off financially and had greater access to capital or other resources, including education and training. Project staff in both countries noted that the individually-owned presses also tended to have better production levels, fewer management problems, and better loan repayment rates.[3] ZOPP staff also noted that, once the profitability of oilseed press enterprises was demonstrated, more women expressed interest in purchasing the press individually so they would not have to share the profit earnings with group members and could avoid the management issues of owning a press cooperatively. However, due to women's limited access to working capital, women were often unable to act on this expressed interest.

Some women participated in the project as part of a family business. Family operations were typically those in which the husband had purchased the press for himself or his wife. In the latter case, men tended to be the legal owners of the press, although women were generally responsible for press operations and sale of oil and seedcake. In almost all instances, the disposition of the income earned from the enterprise was a joint decision between husbands and wives.

One unusual partnership in Zimbabwe was that of a man and woman, not married to each other, who ran their enterprise jointly and in an equitable manner. They had formed their business partnership in early 1994 when they

[1] Disposition of income from oil sales and service pressing varies from group to group. Some groups pay their members back in "dividends" from income earned; others provide free oil or seedcake to members, with the balance of the funds being reinvested in the press enterprise or in other group activities.

[2] Personal communication with VOPP field staff.

[3] Personal communication with VOPP and ZOPP staff.

heard on the radio about ZOPP and oilseed pressing. With a loan from the Social Development Fund of the Government of Zimbabwe, they decided to invest in four ram presses. Both partners were fully involved in the business and the loan was in both their names. When they were selling oil, they paid themselves a salary which covered approximately half their living expenses.

Their business had started off well but, toward the end of 1994, they started having difficulty making their loan payments. The major problems appeared to be lack of availability of pressing seed and the lack of a seedcake market. As a result it had been several months since either of them had collected salaries. This was particularly onerous for the woman, who was a single parent with two children. With the reduction in income from the oilseed press enterprise, she was forced to send her children to live with another family member who could provide for them in the meantime.

Benefits to Participants

Participants received a number of benefits from the projects, most important of which was a variety of income-earning opportunities at several points along the production and marketing chain: press manufacture and sales, sale of pressed oil and seedcake, sale of pressing services, and maintenance and repair of presses. Other ways in which participants could benefit included cost savings due to household consumption of domestically produced (rather than purchased) oil and use of seedcake by-product for fodder. Potential indirect effects of the project included incentives for local farmers to increase oilseed production as demand for seeds rose with the adoption of the presses, and the multiplier effects generated through the employment of wage laborers to operate the presses. Women especially sought additional help in operating the presses either from family members, particularly children, or hired young men from the community.

Traditionally, because oil pressing--a "woman's chore"--is both time and labor intensive, women tended to produce only enough oil for domestic consumption. With the introduction of the ram press, both the time and the amount of physical energy needed to produce comparable amounts of oil have been reduced and at certain times in the year--when seed is available--surpluses for sale can be produced.

The greatest income benefits have accrued to women who were financially better-off to begin with and had sufficient capital not only to purchase the press but also to ensure adequate supplies of pressing seeds to maintain production levels year-round and, therefore, a steady stream of income. Such women are also better able to make their businesses grow and develop as they reinvest some of their earnings. A few women have fairly large enterprises judging from the fact that they own several presses and employ several people to operate them.

Most women, however, run small operations that either just break even or yield a small profit. Lacking access to investment and working capital, land for oilseed production, and the technical and business knowledge and experience to enable them to expand and develop their businesses, they are unable to generate significant earnings. Even resource-poor women who pooled their assets and risks by engaging in group enterprises, as many have done, have not been particularly successful in making their businesses grow. In these cases, the main advantage of the press appears to be the time saved in pressing oil with an improved technology, better access to cooking oil for a longer period of time during the year, and an expanded market for their seeds. In fact, when oil production and sales levels are low, some group members have had difficulty making loan repayments (see discussion under "Working with Groups"). When this results in defaults, it could undermine women's confidence in their business management skills.

On the other hand, because group membership provides women opportunities to strengthen their ties with other women and community members, meet and exchange ideas

with them, it could be an important avenue for building women's confidence and self-esteem. Further, as press ownership affords women the opportunity to develop the entrepreneurial skills required to make and repay loans, manage financial resources, and make financial decisions, this can be another factor in improving women's business acumen, skills, and self-confidence.

Women benefited less from press manufacture, sales, repair or maintenance than from press ownership and use, because so few women are involved in these activities. In Tanzania, only one manufacturer was woman-owned, while there were none in Zimbabwe. Repair and maintenance was also a male-dominated sector, with Tanzanian project staff stating that women did not express an interest in getting involved in these jobs.

Finally, to the extent that the projects have contributed to the expansion of oil production in Tanzania and Zimbabwe and to increased consumption of oil, an important benefit could be an improvement in the nutritional status of local communities. This could be particularly important for young children because, as mentioned earlier, dietary fat provides energy and a medium for the body's absorption of fat soluble vitamins, such as vitamin A, which are vital for good physical growth and development.

However, none of the data available reported on actual nutritional benefits from increased availability and consumption of cooking oil, although the impact evaluation of Zimbabwe's project gives some indication of the potential nutritional benefits (ATI 1995b).

The evaluation also did not gender disaggregate sales and oil production data. On an aggregate level, 12 percent of the sample members reported that they had not sold any oil during the reporting period, primarily because the press had been purchased at the end of the pressing season, or because all of the produced oil was consumed by household members or given away. Conversely, of the enterprises that did sell their oil, a full 93 percent reported selling at least 67 percent of their production. Thirty-four percent kept none of their oil for household consumption.

And yet, when respondents were asked about the impact the press had on their lives, 90 percent said it had improved their families' lives, and 80 percent of those said that the improvement was a result of increased availability of cooking oil or savings from not having to buy oil (ATI 1995b). Thirteen percent felt their families' health had improved.

The use of the nutritionally-rich seedcake by-product as animal feed may be contributing as well to improvements in animal nutrition, but data were unavailable to properly evaluate this impact. However, data from another study in Tanzania unrelated to this project found that the use of sunflower seedcake as a supplement to livestock diets raised milk output and increased net income from milk sales by six percent (ATI 1995b).

Factors Contributing to Project Success

Among the factors contributing to the overall success of the oilpress projects in Tanzania and Zimbabwe were the appropriateness of the technology and the skill and creativity with which it was implemented. The projects were well-conceptualized and carefully implemented by staffs that were creative in their thinking and adaptable to changing needs and situations.

Focused and Comprehensive Approach

Much of the success of the oilseed projects (VOPP, ZOPP, and the Regional Oils) lay in their focus on a single intervention: the development and diffusion of an improved technology--the ram press--to replace a less efficient one that was widely used. In both Tanzania and Zimbabwe, the need for a dependable, affordable, and available supply of cooking oil, especially in rural areas, encouraged local purchasers, manufacturers, and other service providers to, quite literally, buy into the technology. As developed and modified, the oilseed presses have met a critical need in both countries.

Project staff, moreover, studied the oilseed and oil production subsector thoroughly and comprehensively to employ the appropriate strategies for technology diffusion and to support adoption of the press. Prior to introducing the press on an on-going basis, the projects conducted marketing surveys of food oil costs, preferences, and accessibility and quality of oilseed varieties to determine their adaptability to local growing conditions and production patterns. The projects also developed a comprehensive support system, which included training in the production and use of the press and, where appropriate, in business management. They also provided credit and conducted promotional activities to increase availability of oilseeds recommended for use with the press. This comprehensive approach was effective in making the technology widely acceptable.

Affordability and Adaptability

A key feature of the success of the technology itself was the fact that the press was locally manufactured and, therefore, more affordable than an imported technology. The press design, moreover, was under constant revision to reduce production costs and make it more usable. The presses currently available can be maintained and repaired relatively easily by local technicians at relatively low cost. Despite its affordability, however, the presses were sold at subsidized prices--a feature that is currently being re-examined in light of the projects' long-term sustainability.

The projects also have been both flexible and adaptable in their implementation strategies. For instance, in Tanzania, the project initially focused on sales promotion. However, once the market had been developed, VOPP and the follow-on project, T-PRESS, shifted attention to activities designed to reduce project dependency on external inputs and to promote local commercialization. Measures included ensuring that local manufacturers had on hand an adequate supply of "approved" oil presses; training rural artisans in press repair and maintenance; and providing start-up capital to local businesses to sell the presses and offer purchase support. ZOPP is also beginning to shift its implementation strategies from sales and promotion to better institutionalization of press production and sales through local business channels.

Quality of Staff

The high quality of project staff was yet another factor contributing to success. Staff had a demonstrated commitment to the ram press technology and to creatively resolving operational issues so that press owners were satisfied with the product and able to use it effectively. Their professionalism and technical skills made them credible "sales persons." The organizational freedom to innovate and resolve issues in the field were important elements in encouraging staff creativity.

In particular, VOPP's hiring of two women field managers in 1992 and 1993 appeared to have been an important factor in stimulating women's interest in purchasing the ram presses. VOPP recorded a 50 percent increase in purchases by women in 1993 as compared to the previous year. Anecdotal information also indicates that more women began attending the demonstration sessions after the women field managers were hired, and that men were becoming more amenable to the involvement of their wives in project activities.

Multiple Funding Sources

The country projects and the Regional Oils Project have been funded by a number of different organizations, including USAID and IDRC in Tanzania, and CIDA and Africa Now in Zimbabwe. This diversity means that each project has been less dependent on any one funder, and, perhaps, better able to adapt to changing funding priorities. The ability to attract so many funders is a reflection of donor confidence in the technology and in the projects' implementation.

Outstanding Challenges

Although VOPP and ZOPP have been quite successful in developing an appropriate oilpress technology and making it accessible to potential users, a number of problems remain with larger scale adoption of the technology and its utilization, especially by women. In some cases, project staff have initiated a variety of solutions to resolve the difficulties that have arisen over the course of the projects. In many of those cases, the solutions have worked, but in other cases, a solution in one area could not be applied in others.

Limited Oilseed Availability

A key factor constraining development of viable businesses based on the ram press technology, especially for small producers and women, is the lack of access to an adequate and reliable supply of affordable oilseeds. Both VOPP and ZOPP attempted to address the oilseed availability issue at an early stage, though in somewhat different ways. In Tanzania, as noted earlier, alongside press promotion, project staff encouraged the cultivation of the "Record" variety of sunflower seed. This variety, however, did not respond well to the low rainfall conditions in Tanzania. Consequently, the seeds contained less oil than expected, and did not produce enough planting seeds for the next season.

ZOPP promoted a hybrid sunflower seed that was better adapted to the growing conditions and was also a high oil producer, but since this variety was not being grown throughout the country, its supply was not adequate to meet the growing demand. Lacking ready working capital, the smaller oil producers, who are the project's targets, are unable to compete with the large oil producing factories to purchase oilseeds. Small oil producers, especially women, are also at a disadvantage in buying planting seed.

ZOPP is trying to address these issues by working with the government agriculture extension services and with the large scale seed farms.

Lack of Access to Working Capital and Land

The seed availability problem was compounded, especially for women, by limited access to working capital. Availability of working capital would enable women to buy and store stocks of oilseed immediately after harvest when prices are relatively low. Lacking capital, women cannot buy oilseeds in sufficient quantities when they are available at a favorable price. Women are, therefore, unable to ensure themselves an on-going supply of oilseeds throughout the year. Men also face similar problems but women have greater difficulty obtaining commercial loans to purchase the oilseeds because they do not own property and, therefore, have no collateral. The lack of working capital also places constraints on owners' ability to expand existing enterprises. With the exception of ROMA in Zimbabwe, the problem of access to working capital has not been addressed.

Women, moreover, were at a disadvantage in attempting to grow their own oilseeds (to substitute for purchased seeds) because they often did not have sufficient land. They appeared to be reluctant to risk altering current patterns of production to grow more oilseeds on the land they had, as this might endanger subsistence food production.

Business Development

Yet another factor that affected women's enterprises was the lack of technical support or training for business development. This was a particularly important constraint for women whose levels of literacy and education tended to be low and whose previous experience with running enterprises was on a very small scale. Many, therefore, did not have the appropriate resources, skills, or experience to expand their enterprises.

While the projects applied a comprehensive approach to technology development and dissemination, this did not, until recently, include support services for business management and development. Both VOPP and ZOPP have recently initiated efforts to provide women

training in business management, but these efforts have been neither systematic nor comprehensive. VOPP, moreover, offered training only on a pilot basis and only to highly-motivated, better educated women. Thus, women who needed the guidance and skills most were not receiving it.

Gender Awareness and Skills

Lacking specific gender training and skills, project staff have been guided mostly by their intuition in working with women. So far, they have met with success, as shown above, in improving outreach to women. Now that they are beginning to confront the more difficult problems women face in making their oilseed pressing enterprises succeed, it is unclear that staff have the skills and tools needed to address them. Also, staff may not be well-prepared to anticipate emerging opportunities. For instance, T-Press, VOPP's successor, is currently developing a decentralized, non-project dependent system for purchasing, repairing, and maintaining the presses. This would be an appropriate time for staff to determine how women can become involved in various aspects of the new system. They should be thinking about ways, for example, to provide equal opportunities to women to become repair and maintenance artisans, who currently are all men.

Sustainability

A broader, overarching issue is long-term sustainability of these projects. Currently, the retail cost of a press is subsidized to lower the purchase price to buyers. The projects have borne the costs of training, maintenance, and other administrative services. It has been suggested that the follow-on privatization of these services in Tanzania (through the T-Press Project) will contribute to a price increase, in that private sellers will have to include the costs of providing those services, in addition to a markup for sales margin, in the purchase price of the press. This increase might be expected to fall heavily on those most economically constrained--women.

To their credit, both projects are attempting to offset the anticipated decrease in demand that will accompany an increase in price. In the next phase of the project in Tanzania, for example, T-Press intends to use two distinct promotional strategies. In communities with an established demand for the presses, the sales price will be set to reflect sellers' inclusion of services and a sales margin. In communities where presses are being introduced for the first time, they will continue to be sold at subsidized prices, as has been true in the past. Whether these strategies will reduce women's vulnerability to price changes remains to be seen.

Other sustainability issues include building local capacity to provide the other inputs that are part of the overall oilpressing subsector, such as press manufacturing, maintenance, and repair, and the provision of credit services. In response to these needs, the projects are training local manufacturers to improve press quality; working with agricultural research and extension services to address oilseed availability problems; and training community members as press repair and maintenance artisans.

Women's potential roles in manufacturing, sales, and repair had not been explicitly addressed by VOPP, although project staff reported that there was no demand from women to take up those activities. Also unknown is the potential effect on women owners and press users if only men are in those positions--would the men provide the same quality of service for the same prices to women and men?

The projects are also attempting to transform the credit-purchase systems into self-sustaining ones by, for example, charging interest and offering credit through the sellers and repair/maintenance providers, rather than through the project. Again, reducing the subsidies will increase the need for individuals to support the capital investment and recurrent costs, which might be onerous for women.

Looking to the Future: Regional and Other Solutions

Many of the problems and constraints raised above are not insurmountable. Indeed, it may be possible to address some of them fairly easily and with little additional capital investment. The problems described show that the outstanding issues go beyond producing and promoting the press. Most pertain to making a success of the business ventures based on the press. This requires project staff to broaden their view of the project and its objectives and to adopt an "enterprise" approach--i.e, not only to enhance press availability but also to provide support to press owners at all points along the oil production system. While this has been done to some extent on the side of the technology itself by ensuring repair and maintenance, the business side has not received adequate attention.

One response to many of these issues was the creation of the Regional Oils Project by ATI in 1992. Although Regional Oils was initially directed out of Washington, a new office was established in Arusha, Tanzania, in 1994. The overall aim of Regional Oils is to serve as a mechanism to strengthen and expand the distribution and support of the oilseed press by:

- Improving and maintaining the technical integrity of the press from country to country by working with engineers and manufacturers to guarantee quality control;
- Developing extension and interactive linkages between country oil press organizations;
- Further developing a strategy of sustainability through commercialization of oil press sales and services beyond mere dissemination of the technology. One strategy toward this end is to develop partnerships with governments and other NGOs and PVOs to bring non-ATI projects that work in related areas into an interactive partnership with Regional Oils; and
- Strengthening project staff skills through training and sharing experiences.

Currently, Regional Oils responds to needs by country projects as well as initiates actions in support of regional issues. It plays an active role in pricing policy and the development of sustainability strategies, in addition to reviewing in-country work plans to ensure that experiences gained in countries with a longer history of village oilseed production with the ram press technology are shared with those developing new projects.

Despite these efforts, other issues remain, including changes in the cost structure and service delivery and support systems which might impact differentially on women and men. Both projects should expand their efforts to identify and test appropriate ways to achieve a sustainable development project that meets the needs of both men and women in rural communities. In addition, the following actions are recommended:

- **Support business development.**
  Projects should provide enterprise development support for all those who need it, but most particularly women. This would better enable women to develop their own businesses, and should include training in business administration and management, accounting, and marketing. The training and technical assistance should be provided regardless of gender, educational attainment or subjective assessments of "motivation." In Zimbabwe, these services could be provided through the fledgling business association, ROMA. Working with and through ROMA would help strengthen it institutionally and at the same time meet member needs for services.

- **Expand access to credit.**
  Projects should seek ways to improve press owners' access to working capital by setting up a credit facility based on sound financial

principles that would reach women and lower-income press owners. Numerous resources are available to guide the design of an appropriate, self-sustaining credit mechanism.

- **Improve access to oilseeds.** Projects should ensure press owners access to a reliable, regular, affordable, and year-round supply of oilseeds. This is especially critical to women press owners who are most vulnerable to fluctuations in seed availability and increased competition for smaller supplies. Improved access to credit could help owners finance bulk purchases at harvest and storage to ensure individual supplies. Another option in Zimbabwe may be to arrange for bulk seed sales to ROMA, which would facilitate direct sales of seeds by farmers to press owners.

- **Promote exchanges of women staff.** Regional Oils has been supporting staff exchanges to promote on-the-job training and sharing of experiences and problem solving approaches. This same technique could be used to promote attention to women's issues in all countries by staff exchanges of women field managers.

- **Provide gender analysis training.** Projects should provide gender analysis training to staff to ensure that current efforts and future undertakings, particularly as the projects transform and expand, maximize opportunities for women to participate and benefit. Training should include women in development and gender theory, methodology, and practical tools to identify opportunities to enhance women's participation and to address women's needs, concerns, and constraints.

- **Engage women in all project activities.** All country and regional projects should explore additional opportunities to engage women in **all** levels of project including project management and implementation, press manufacture, sales, repair and maintenance, purchases, and enterprise development. This is particularly important as steps are taken to divest activities from project staff to local communities.

Lessons Learned

- *A WID intervention within an on-going project works in increasing women's participation in the short-term, but additional supporting services are needed on an on-going and consistent basis to ensure long-term sustainability of women's participation and benefits.*

The conscious focus on women prompted by the financial contributions made by the WID Office of USAID and CIDA did help in raising press sales among women in both Tanzania and Zimbabwe. The employment of women field managers and the availability of credit, particularly in Tanzania, proved to be important mechanisms to inform women about the press and to enable them to buy presses. Neither measure, however, was sufficient to ensure the viability of women's oil processing enterprises.

- *Poor women, who lack access to key business inputs such as working capital, raw materials, and business skills and training, need complementary services to develop their enterprises.*

This was not a demonstrated need in the cases of women who were better educated and financially endowed. In general, the project had focused more on technology development and dissemination, and less on business development. This imbalance became readily apparent as more women bought presses. Press owners' response in Zimbabwe was to set up ROMA which is attempting, with the help of ZOPP, to provide some of the needed services. Similar

support services are needed for women in Tanzania although project staff may have to offer them directly until press buyers themselves are in a position to set up a similar organization in Tanzania.

- *As access to cash is a constraint for poor women micro- and small-entrepreneurs, they need access to stable and consistent sources of credit to meet their needs for working capital to sustain their enterprises.*

The need for working capital among press owners who became entrepreneurs was a constraint that had not been anticipated by project staff but proved to be an important impediment, especially for women. However, because microfinance is a highly specialized activity in which VOPP and ZOPP staff are neither trained nor experienced, the projects need not and probably should not attempt themselves to provide credit. They could, however, help identify credit sources and, initially, help women with the procedures and processes of obtaining credit, with which they may not be familiar. If the projects decide that other credit options are not available, and that they should set up a more comprehensive credit facility than they now have, they should be guided by the principles of sound microfinancial practices, including charging market rates of interest and ensuring that operating costs are covered. Extensive guidance is available on such practices based on the cumulative experiences of successful microfinance institutions all over the developing world.

- *Meeting the development needs of poor women requires project staff to be trained in gender-related issues. They must be aware of women's economic roles and responsibilities, well-versed in the institutional and resource constraints that prevent women from meeting their economic survival needs, and knowledgeable about what is needed to overcome these constraints.*

Unless project staff are trained to look for and identify gender-related issues, they cannot be held accountable for outcomes which may, in fact, not be gender-neutral. Thus, there is a critical need to provide the appropriate tools and methodologies to staff who are responsible for developing and providing services to ensure that project interventions have their intended effects on meeting women's needs.

- *Working through existing structures or groups appears to be more effective than creating parallel structures or groups.*

The lessons from both Tanzania and Zimbabwe are that working with groups can be a viable mechanism for sharing risks among women and other community members who can ill afford to take risks. However, these groups should be formed at the initiative of the community members to meet commonly-expressed needs. Projects will find these groups to have a cohesion and identity that does not exist in groups organized expressly for a project-specific purpose.

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Linking Poor Women's Reproductive and Productive Needs: Save the Children's Projects in Bolivia

Mayra Buvinic and
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The peasant woman had inquisitive eyes and a warm smile. She was more talkative than the other women who met with the health worker that day in the high plains of Bolivia. She was learning how to read and write and wanted a loan to purchase a bullock to plow the land. But it wasn't the loan that was on her mind as she approached the health worker.

She had missed her period, was likely pregnant, and could not afford another child. She had worn an IUD, but had removed it with her own hands because her husband feared that using contraceptives could make women unfaithful. Her options were grim: have an unsafe abortion, hemorrhage, and possibly die, or carry the unwanted child to term, and perhaps also die.

Save the Children, the American-supported NGO, had provided the peasant women in this area of Bolivia with access to contraceptives, as well as credit and literacy programs. But it was an uphill battle. Women in these rural communities have, on average, 6.4 children per woman and maternal mortality is extremely high--14 deaths per 1,000 live births. The combination of their desperate situation and their critical roles in the peasant economy made women a prime target group for Save the Children's efforts to promote development in poor communities.

In the early '90s, Save the Children and its Bolivia-based staff (SC/B) launched two interventions in Inquisivi province of Bolivia targeting women. They began by addressing women's reproductive health needs through a project called Warmi (the Aymara[1] word for woman), started in 1990, and followed in 1992 with the Woman-Child Impact Program (WCI), which broadened the focus of Warmi to cover women's educational and credit needs.

SC/B's experience with these two projects provides constructive examples and lessons learned, and suggests mechanisms that non-governmental organizations (NGOs) like Save the Children can use to maximize the effectiveness of interventions supporting women's productive and reproductive roles.

Save the Children's work with rural women in Bolivia shows the close links between women's reproductive and productive needs; the urgency of addressing these needs; and the feasibility of doing so with modest investments and potentially high immediate payoffs in terms of increasing women's and children's well-being.

The Status of Poor Women in Bolivia

More than half (65 percent in 1989) of the population in Bolivia, and almost all of the population of Bolivia's rural areas, are poor (Psacharopoulos et al. 1993). This poverty affects and is reflected in women's situation, which is one of the worst in the region. Bolivia has some of the lowest regional scores in key measures of women's well-being: life expectancy, maternal mortality, fertility, literacy, and female schooling. At 63.5 years, female life expectancy at birth is the lowest recorded number for women in Latin America and the Caribbean, and this average life expectancy figure can hide differences of up to fifteen years between better-off women in urban areas and poor rural women (United Nations 1991; FLACSO 1993). Bolivia has the highest maternal mortality rate in the region, a rate that rose from 480 to 600 deaths per 100,000 live births between 1980 and 1990.[2] Half of maternal deaths occur during delivery and, of these deaths, half are due to hemorrhag-

[1] Twenty-four percent of the Bolivian population is Aymara, while 39 percent are Quechua, the other dominant indigenous groups (Psacharopoulos and Patrinos 1994).

[2] This trend is reflected in a parallel increase in the regional average in maternal mortality from 128 deaths per 100,000 births in 1980 to 155 deaths in 1990.

ing. It is, therefore, not surprising that of all the countries in the region, Bolivia had the lowest percentage of births assisted by a trained attendant: only 55 percent in 1985.

The situation of inadequate maternal health care is made more difficult by the presence of high fertility rates. In 1990, Bolivia's total fertility rate stood at 4.6, almost double the regional average, with the rural rate at 6.4. This high fertility rate is in part a response to the fact that Bolivia has the second highest child mortality rate in the region, which makes it difficult for couples to plan for family size and spacing. In 1990, female child mortality rate was 7.8 and male rate was 8.7, both per 1000 births. Also driving the high fertility rates is low usage and availability of family planning services. Although reported to be rising, as of 1989 only 30 percent of women of child-bearing age used any contraception and only 12 percent used modern methods. Among rural women these figures stood at 19 percent and 5 percent, respectively (FLACSO 1993).

In terms of educational preparation, illiteracy is declining in Bolivia, although it remains high compared to other Latin American countries and continues to be a major problem for rural women. In 1992 half of all women aged 15 and older in rural areas were illiterate, more than twice the rate recorded for rural men and more than three times that of urban women (FLACSO 1993). In 1992, half of all women aged 15 and older had first level schooling or less and 23.7 percent had no schooling at all. In rural areas these figures were 73.7 percent and 40 percent, respectively. Only 10 percent of men in the country and 18 percent in rural areas had no schooling (FLACSO 1993). With little schooling, few women participate in the formal economy but large numbers of them participate in agriculture and the informal sector, in work that goes mostly unrecorded in official labor force statistics.

Through a process of "autodiagnosis", described in more detail below, the Warmi and Woman-Child Impact programs were right on target when they defined the most pressing needs to address. Based on the region's stark statistics, Warmi targeted rural women's survival and reproductive needs and WCI made women's literacy and credit their focus. This accurate definition of needs is an obvious but basic element for project success, and it is one that SC/B accomplished well. Moreover, as the sections below reveal, the diagnosis women made of their own needs accurately reflected the reality of their situation. This correspondence between expressed and real needs is critical for project effectiveness.

Save the Children/Bolivia's Work in Inquisivi

Located some five hours by road southeast of the capital city of La Paz, Inquisivi province covers an area of some 5,000 sq. kilometers, with terrain characterized by high plains (*altiplano*), high Andean valleys, and subtropical valleys. Inquisivi has a total population of about 52,000, of which about 15,000 reside in the areas covered by SC/B activities (Howard-Grabman, n.d.). The vast majority of residents in the project area are of Aymara extraction, although some Quechua migrants can be found in the lower valleys. The principal economic activities of households in Inquisivi are subsistence and small-scale commercial agriculture of grains and fruits. Most households keep a small number of livestock, ranging from chickens and pigs to, in a few cases, a few head of cattle. Most families own land that they have purchased or acquired as a result of land reform. Women can and do own land.

Among the most important reasons for SC/B's selection of Inquisivi as the site of project activities is the province's considerable economic, social, and health challenges. Inquisivi was once a relatively prosperous mining province, but the decline in the price of tin, its main trading commodity, led to large-scale unemployment and outmigration. The land

reform in the 1950s allocated land to many poor families in the province, but the absence of complementary economic and human resource development programs, the use of inappropriate agricultural practices by migrants unfamiliar with the agro-ecology of fragile environments, and the migratory nature of the communities, all contributed to unproductive and unsustainable agricultural practices. All of the above was exacerbated when hyperinflation hit Inquisivi during the 1980s.

SC/B works in three distinct geographical zones in Inquisivi, each distinguished by its own socio-cultural characteristics. Families in the Inquisivi Zone (in the upper *altiplano* regions) tend to be older and more stable, their homes more dispersed and quite tradition-oriented, which makes them somewhat resistant to change. However, when change is accepted, it tends to be adopted quickly by households throughout the community. On the other hand, the communities in the Circuata and Licoma Zones (Andean and subtropical valleys) are less traditional and more dynamic. Many families are recently arrived migrants, and open to interaction with "foreigners". Communities in these zones are more willing to experiment with new interventions, although they do so on a family by family basis.

In all three zones, SC/B works primarily with geographically isolated communities that have restricted access to government services, such as potable water, sewerage, paved roads, electricity, clinics and health posts. Although this isolation creates logistical difficulties, fairly straightforward interventions such as child immunizations or the introduction of an improved maize variety, can produce large payoffs in terms of improving otherwise poor child health conditions or low agricultural productivity. SC/B has been active in the province since the mid-1980s, delivering services through community-based participatory models, where communities participate in the different stages of project design and implementation. Services are funded by individual U.S. donations to Save the Children, through sponsorship of children in Inquisivi and elsewhere, and by monies from the U.S. Agency for International Development (USAID) and other donor agencies.

In order to facilitate replicability and sustainability of the interventions that are introduced on a small scale in the communities, SC/B places priority on collaborating with national institutions. For any particular project, Save the Children may play the role of organizer, trainer, facilitator or service provider. SC/B also emphasizes documenting its experiences and methods for wider dissemination at the national level.

Project Warmi

Motivated by the bleak health conditions of women and children in Inquisivi, in 1990 SC/B launched Project Warmi, a comprehensive maternal and neonatal health project. A retrospective study of maternal, perinatal, and neonatal mortality carried out by SC/B staff had found that mortality rates were extremely high in the province. Perinatal mortality was 103/1,000 births; neonatal mortality was 69/1,000 live births; and maternal mortality was 1400/100,000 live births. Probable causes of perinatal death were identified as asphyxia, sepsis, trauma, hemorrhage, and hypothermia. Probable causes of maternal death were found to be hemorrhage, sepsis associated with intrauterine fetal death and puerperal sepsis, and abruptio placenta (Howard-Grabman, n.d.).

The financial and technical support for Project Warmi was provided through MotherCare, a multicountry project financed by USAID and implemented by John Snow, Inc. A primary goal of Project Warmi was to develop and test a community-based approach to improving maternal and neonatal health in a remote setting with little access to adequate formal health services. Project Warmi employed staff from the area who spoke the local lan-

guages and were knowledgeable about community social and cultural norms. Staff received training on the health needs and complications that can arise during pregnancy and the neonatal period, and on family planning approaches and contraceptives. Warmi organized women's groups to raise women's awareness that their individual problems are often common to others and that together they are more likely to find solutions, but was careful not to exclude men from community meetings.

The Community Action Cycle

Groups followed a four-stage "Community Action Cycle," to identify needs and practical solutions (Howard-Grabman, n.d.). The cycle began with an "autodiagnosis", in which over four sessions, each of approximately four hours duration, women identified the three most important maternal and neonatal health problems that were to be addressed by the community (see annex 1 for the steps of the autodiagnosis). A "planning together" stage followed, in which community plans were developed by men and women, first separately and then jointly, to address the problems identified in the prior stage. The last two stages were the implementation and participatory evaluation stages. SC/B was not able to field-test this last evaluation stage.

Program Accomplishments

In 1993, at the end of its three-year implementation schedule, Project Warmi had an impressive list of accomplishments. Women's groups had accurately assessed priority health needs (see annex 2) and key barriers such as: lack of access to health post facilities; lack of doctor, ambulances or sufficient funds to purchase health services; little awareness of prenatal care; and, in some cases, husbands' reluctance to allow wives to seek medical assistance. Women also identified the lack of economic resources under their control and a lack of information on health care and economic opportunities as key constraints. They asked for literacy training and credit to address these needs. SC/B responded to women's need for credit and literacy training through the Woman-Child Impact (WCI) Program, the follow-on project that relied on the groups organized through Project Warmi.

Project Warmi also had organized and trained 50 women's groups (850 women) in the "autodiagnosis" process; developed the "planning together" process in 22 communities; identified and trained 87 midwives; provided family planning services in seven communities in collaboration with AYUFAM, a family planning organization; and developed reproductive health educational materials and five radio programs.

The above accomplishments of Project Warmi were key factors in bringing about a rapid improvement in women's and children's health in the project area. These improvements include (Howard-Grabman, n.d.):

- A decrease in the number of detected cases of perinatal and neonatal mortality from 75 out of 639 total births (1988-90) to 31 out of 708 total births (1991-1993);
- An increase in users of contraceptives from an estimated baseline of approximately 0-1 percent to 27 percent of women of reproductive age in seven communities where services were offered;
- An increase in tetanus toxoid coverage (minimum of two doses) in women who delivered--from 48 percent to 82 percent;
- An increase in percentage of pregnant women who made at least one prenatal care visit--from 45 percent (baseline) to 77 percent (last project-year average);
- An increase in the use of trained birth attendants (including doctors, nurses, midwives, husbands and other family members)--from 13 percent (baseline) to 57 percent (last project-year average); and

- An increase in immediate breastfeeding (within first hour)--from 25 percent (baseline) to 61 percent (last project-year average).

Moreover, while not quantified, there was a noticeable change in women's assertiveness in public. Women started "speaking up" in general community meetings and there was increased communication among themselves.

Perhaps the greatest success of Warmi is that its methodology will be used at the national level through PROCOSI, a network of NGOs in Bolivia working on issues of child survival. This could be its greatest test, however, and it remains to be seen whether the Warmi methodology, whose success is based on careful design and quality implementation, can be replicated on a larger scale.

Women in the rural areas of Bolivia have an average of 6.4 children.

Woman-Child Impact Program

In 1992, with the support of USAID, Save the Children launched the Woman-Child Impact (WCI) Program in Bolivia, as well as in Bangladesh, Haiti, and Mali, "to place greater emphasis on woman-focused and child-centered approaches to development" (Save the Children 1992). WCI provided a timely response to the needs Bolivian women had identified through Project Warmi's autodiagnostic: literacy, in order to have access to information, and access to credit to increase women's income, which has the corollary benefit of improving women's access to critical health care services. Thus, Warmi's autodiagnosis illustrated the interconnection between women's reproductive and productive needs in poor rural communities.

In response, the Bolivian WCI program focuses on two sectors (Save the Children 1994):

- **Economic opportunities:**
  To encourage economic activities for women in order to increase family incomes and the availability of goods and services. Increased economic opportunities, in turn, lead to improvements in the quality of life of children; and

- **Education:**
  To improve the quality of elementary education in rural areas; to increase literacy levels; to increase school attendance; to train women on topics related to their own well-being; and to influence the Bolivian Ministry of Education's policy for rural areas.

The five-year field budget for the educational component is US$195,000; the enterprise component's budget is US$146,000. More than half of SC/B field staff (monitors and supervisors) are women, which enhances the project's ability to target women with services. The two services that have most actively extended to women are credit and literacy training. While women served by the WCI program demanded both services, there is a stronger demand for credit due to substantially lower demands on women's scarce time, low transaction costs, and immediate returns.

Extending Credit to Women

All women in the SC/B project area are involved in productive activities, with a substantial number of them participating in market production. Women in the lowlands or subtropical environments of Inquisivi trade foods, especially fruits, as well as coffee and coca. Aymara women in communities in the highlands are more likely to be engaged in subsistence agriculture and animal production, and occasionally market chickens, pigs, and other farm animals. There appears to be few or no cultural constraints against women having access to credit, participating in the market economy, or travelling unaccompanied to markets. Markets in the province are often distant but available, enabling trading and economic activity. Principal markets include the large markets of Oruro (3 days travel), and La Paz (4 days), and the smaller market of Inquisivi (3 hours), used by the more isolated highland communities.

Women use credit to improve production and marketing activities. They pay transportation charges related to marketing food products in distant markets; pay men to cut trees for charcoal production; purchase ovens for the home-based baking of bread for local sale; and purchase livestock, ranging from bulls (2000 Bs) for animal traction, cows (1000 Bs) for meat and milk, to pigs and chickens for home consumption and sale.[3]

With few exceptions, prior to WCI's credit program women did not have access to institutional credit, although they borrowed from relatives and friends. Using the "solidarity group methodology" and relying on the groups formed through Project Warmi, SC/B field staff structured a simple, non-customized solidarity group lending program with small fixed loans that increase in amount as the prior loan is paid back. The loan amounts in the first cycle are relatively small--on average about 300Bs for each member of a group of three to five members--and must be repaid within four months. SC/B charges the same 4 percent monthly interest charged by PRODEM and Banco Sol, two other microfinance institutions that make small loans in Bolivia.

During 1994, credit was extended to 273 women in 47 groups in 21 communities. A total amount of 121,250Bs (approximately US$26,000) was provided to women across all loan cycles, with a near universal repayment rate of 99.98 percent (Save the Children 1994). The credit program has also had a positive, albeit small, impact on the saving rate among solidarity groups. Twenty groups reported that their members now routinely save some of the revenues generated from economic activities undertaken with WCI credit. Moreover, SC/B staff has observed an improvement in credit group cohesion and growing confidence among women borrowers.

Credit Lessons and Challenges

Despite the demonstrated demand for female-targeted credit, SC/B's credit intervention is not self-sustaining. SC/B has not and will not strive to insure that the costs of delivering credit are covered, since SC/B is not in the business of running a microfinance operation. But SC/B is compensating for this potential drawback by establishing links with national microfinance agencies which can take over the loan program initiated by SC/B. In so doing, SC/B is significantly expanding rural women's access to credit. The existence of two national lending institutions--PRODEM, a non-profit microfinance agency, and BancoSol, a for-profit bank born out of PRODEM, which graduates its clients into the commercial sector--is critical to insuring that the demonstration value of SC/B's credit efforts is not lost. SC/B's careful planning to link its credit activities with these national agencies (demonstrated by SC/B's use of identical interest rates), and its intention to transfer the credit portfolio to PRODEM upon the establishment of a PRODEM office in Inquisivi, will make the difference in the success of these activities and can provide a model to be replicated in similar rural financial markets.

[3] In December 1994, 4.6 Bolivianos or Bs equaled one U.S. dollar.

Rural women in Latin America are considerably restricted in their access to financial markets, including those which have opened up as a result of microfinance operations. In Bolivia, PRODEM records the lowest proportion of women clients in rural areas. This is because of the invisibility of rural women's productive activities and strong cultural obstacles to women's participation in rural areas. By targeting rural women with credit, SC/B has set itself up to play a unique role in the first step of a possible three-tier graduation process: SC/B would provide women with the first institutional credit experience through non-threatening women-only solidarity groups and, by transferring its portfolio to PRODEM, would guarantee their graduation into a microfinance program that is open to both sexes. PRODEM, in turn, has the potential of graduating these women borrowers, who were launched by SC/B, to the commercial sector by transferring its portfolio to BancoSol. Without the SC/B introductory credit step, facilitated by SC/B's prior work in reproductive health, it is unlikely that these Inquisivi women would ever have access to institutional credit and savings of the type BancoSol offers (see box on this page for more details).

Within the credit program, SC/B faces the challenge of meeting the credit needs of at least two very diverse groups of women entrepreneurs with an intervention which cannot be customized, given institutional and cost limitations. Lowland women need short-term credit for micro-commerce (fruits) while Aymara highland women need longer-term credit for agricultural production and animal raising. The current loan sizes are too small and the repayment periods too short for this latter group of women clients. An immediate practical solution is to increase loan amounts to all women (raise initial loans from 300 Bs to 400 Bs, for instance), which SC/B is considering, but the larger issue is that the current structure of SC/B, and more generally, microfinance programs, may not be well suited to the credit needs of small-scale women farmers. If the trend is to move away from specialized credit to multipurpose rural banking, customization (with its added costs) will become critical to meet the credit needs of different women clients, unless a better non-customized formula is found for agricultural producers.

A Proposed Three-Tier Credit Scheme

In Bolivia, a three-tier credit scheme under design will link low-income rural women to the informal and formal banking sectors. Through the Woman-Child Impact (WCI) program, Save the Children/Bolivia extends credit to women's groups in Inquisivi province. The WCI credit program offers women small loans for a variety of productive activities. Women's collectives guarantee repayment of the loans, and women are charged the prevailing commercial market rate.

The non-governmental finance institution Fundacion para la Promocion y Desarrollo de la Microempresa (PRODEM) was created in 1986 to assist Bolivian microentrepreneurs by providing credit services and technical assistance. PRODEM also charges the prevailing market interest rate but, as an NGO, it is legally restricted from offering savings or deposit facilities. The increasing demand for full financial services and the success of its credit program prompted PRODEM to create its own full-fledged financial institution, BancoSol, which operates as a formal commercial bank.

BancoSol is the first sustainable commercial bank that provides credit to microentrepreneurs. In 1993, BancoSol issued more than 106,800 loans, the majority of which (about 70 percent) went to women. Its growing loan portfolio and high repayment rate of close to 100 percent demonstrate the potential for viable financial institutions that target microentrepreneurs (What Works 1994).

Currently, PRODEM graduates loan portfolios to BancoSol, establishing a two-tier system. From 1992 to 1994, more than 34,000 clients were successfully graduated to BancoSol, of which approximately 70 percent were women (personal communication). The proposal is to add a first tier to this system: Save the Children/Bolivia, which has succeeded in targeting low-income rural women through a women-only program, will transfer its portfolio to PRODEM, increasing PRODEM's ability to reach rural women. PRODEM, in turn, has the capacity to transfer women to BancoSol.

PRODEM, which operates throughout Bolivia, is expanding its operations in the rural areas, and will open an office in Inquisivi province, where there are no formal banks. Women's participation in PRODEM's rural credit programs tends to be lower than in its urban credit schemes. In Achacachi and Capinota, for example, women constitute only 37 and 25 percent of borrowers, respectively (PRODEM 1994). In anticipation of PRODEM's recent operations in Inquisivi, Save the Children designed this three-step process to enhance access of Inquisivi's rural women to PRODEM's rural credit programs and, ultimately, to graduate them into the formal credit sector. By reaching the women's groups at the grassroots level and preparing these groups for PRODEM's lending practices, Save the Children/Bolivia is able to break the typical barriers to credit these rural women face. By graduating groups rather than individuals to BancoSol, PRODEM mitigates the otherwise high transaction costs of small individual loans that tend to be unsustainable in the formal sector.

This three-tier credit scheme would ensure that poor rural women have access to much-needed credit while contributing to the ultimate expansion of an equitable and sustainable financial sector. Documenting the efficiency and effectiveness of this three-tier model can assist in its replication in other areas of Bolivia (e.g., the Cochabamba area) as well as elsewhere in Latin America, where rural women's access to financial markets is restricted.

Another challenge that SC/B faces is the delivery of services complementary to credit. Women farmers, especially those investing in livestock, need agricultural extension services to make profitable use of credit. More than once researchers heard the story of women losing entire loans invested in the raising of sick pigs or chickens, because SC/B has a separate agricultural extension program but it is not geared to women farmers.

One final challenge, discussed in more detail below, is the potential problems raised by using a single service provider to deliver credit and training.

Increasing Women's Literacy

About 60 percent of the women in Inquisivi are illiterate, more than twice the rate for males. The lack of basic reading, writing and arithmetic skills reduces the productivity of women's work by making it more difficult to access information on credit, to understand technical assistance materials, and to evaluate the financial viability of different production activities. There is also a personal and familial cost to illiteracy. Women interviewed reported that they would like to learn to read and write in order to "read letters from my children," or " help children with homework," to "not be 'blind'," and to "understand important papers." There is a strong preference for literacy in Spanish, rather than Aymara. Women repeatedly expressed a strong interest in learning rudimentary mathematics, and those whose literacy knowledge was greater wanted to obtain post-literacy training and new materials.

In partnership with SENALEP, an autonomous agency in the Ministry of Education, WCI forms literacy groups, trains "monitors" or literacy teachers from the communities, and provides materials and technical monitoring through SENALEP. To promote sustainability, communities are encouraged to compensate the literacy monitors, although most monitors volunteer their time.

At the end of 1993, literacy groups were organized in 37 communities in Inquisivi. As of 1994, the number of communities with literacy groups had risen to 53, and the total number of participants enrolled in the literacy classes was 1,192, including 1,098 (92 percent) women and 94 men. In 1994, 229 women completed the 32 sessions of basic literacy series and graduated to post-literacy activities (Save the Children 1994).

Participant interest in literacy remains high, although many women have found it difficult to sustain their involvement in the literacy group. In 1994, the actual number of persons consistently attending literacy classes was 775, representing a drop out or absentee rate of 35 percent of total enrollment (Save the Children 1994). While this absenteeism rate seems high, SC/B literacy training may be judged a success (particularly with respect to maintaining high levels of motivation among participating women) when it is compared to the government's mostly failed efforts.[4]

Explanations for the drop-out rate are multiple and underscore inherent difficulties of literacy interventions. A frequently mentioned problem is the quality and high turn-over of the literacy monitors, most of whom remain unpaid volunteers. Aside from adequate training (which not all monitors have received), monitors often need to "customize" instruction because participants in literacy training vary substantially in prior literacy knowledge and ability. Customizing literacy instruction is difficult, requires flexibility and access to a variety of materials, and it is the lack of customization which often results in perceptions of low quality instruction and causes drop outs. The high drop-out rate among literacy monitors means that there is often little long-term "teaching rapport" developed between monitors and their students.

A second obstacle is women's time constraints. Women have very little "free" time to devote to literacy training, which is reflected in the fact that most literacy groups choose to sacrifice leisure (weekends) rather than work time for literacy meetings. It is also evident that

[4]A US$2 million women's literacy campaign under the auspices of Bolivia's Social Investment Fund closed down due to lack of success.

women feel pressure to justify to their husbands, whose approval they need in order to attend, the time spent in literacy classes. Women have reported that their spouses questioned the quality of the training, doubting that it was possible to learn reading and writing late in life.

There is also a lack of adequate training materials, especially for those having graduated from the basic literacy series. Finally, there exists a lack of environmental reinforcements to keep up the learned ability to read and write. There are few reading materials such as newspapers or books in the communities. There is, however, significantly more opportunity to use knowledge that can be applied to business transactions, such as basic mathematics and signing one's name.

Actions to Strengthen Literacy Training

SC/B is aware of many of the constraints to a sustainable and effective literacy training program for women (and men). Through both internal reviews and external evaluations of the program, a number of actions have been recommended for strengthening the program. These actions include:

- Upgrade the quality of the training of literacy monitors and their supervisors by reviewing and revising SENALEP's training and supervision methods;

- Develop community- or institution-based mechanisms to pay literacy monitors. Unless some form of in-kind or cash payment can be found, the quality of the literacy instruction will most likely continue to be low, principally due to high turnover in monitors and lack of instructional continuity within groups;

- Evaluate whether long-term, volunteer-based literacy programs are truly sustainable, and whether an alternative might be a higher-quality, intensive campaign that over a shorter period provides basic literacy skills. Such a campaign might make it more feasible to secure compensation for literacy monitors, from both the community and the WCI program. Once basic literacy skills are acquired, monitors could shift their involvement from intensive instruction to distributing reading materials and being available, as needed, to work with individual women on specific reading and writing activities. It may also be the case that women seeking these "one-on-one sessions" may be more likely to compensate the monitors for their assistance. When they feel it is warranted, literacy groups, led by the monitors, could still meet to obtain new materials and sharpen skills;

- Develop ways to enrich women's environment so that they can practice their newly acquired literacy knowledge by making available books (through mobile libraries) and, more importantly, increasing access to newspapers and magazines;

- Expand access to training materials and establish the capacity to offer different levels of literacy training, to avoid boredom and drop out;

- Eliminate stereotypical female activities, such as painting and embroidery, that currently accompany literacy instruction. Reject the assumption that women need leisure-type activities that break their routine work, and assess the tradeoffs between time occupied in these leisure-type activities (with no economic returns) with time occupied in rest or in productive activities. Examine paternalistic assumptions regarding the need to structure women's leisure time. Listen more carefully to women's preferences for training and "activities": mathematics, different cooking recipes, instruction in agricultural and livestock themes. These new training and instruction activities should be pro-

grammed as separate from literacy instruction, resulting in individual literacy training sessions that are shorter.

Lessons Learned

Rough calculations indicate that the Warmi project spent US$270,000 over three years or $67.50 per woman to implement reproductive health care interventions. Through the end of 1994 WCI had roughly spent $90,000 in field costs to deliver credit to 273 women or $330 per woman, and $60,000 in field expenses to deliver literacy training to 1,192 mostly female adults, or $50 per trained adult. These are modest field expenditures, particularly considering the added benefits to children and families in the project area and the demonstration effects produced.

Several factors were found to be crucial to the overall success of SC/B's work with women. First, headquarters and field staff were knowledgeable about and committed to women's issues. In addition, project designs responded to women's real as well as perceived needs. And, finally, national institutional capacity was able to take over the functions performed by the NGO and replicate successful interventions on a larger scale. Furthermore, a number of lessons were learned that may be of use to other such projects in the future:

- *Using the same service provider to address different needs--to deliver both credit and literacy services, for instance--may be inappropriate.*

It is clear that Warmi, a reproductive health intervention, opened the doors for WCI, an intervention addressing women's education and credit needs; that in poor rural communities women's reproductive and productive needs are linked; and that it is very difficult to address one without the other. It was also clear, however, that using the same service provider to address these needs, and deliver both credit and literacy, for instance, may be inappropriate. Currently, SC/B field supervisors function both as teachers and credit analysts/collectors--functions that are different and perhaps incompatible. While it may be more simple for staff to perform multiple functions, and it cuts back on administrative costs, implementing agencies with programs similar to SC/B need to examine more closely the effectiveness of using the same service provider to address women's different needs.

The problem with the combined-function approach is that, due to the mixed roles of field supervisors, communities tend to perceive wrongly (since borrowers pay market interest rates) that credit is a donation rather than a paid financial service. Similarly, while communities are not paying for literacy training, they incur participation costs that can be quite high for women in terms of time and effort devoted to attending training sessions. The awareness that women trainees are "purchasing" literacy training by investing scarce time and effort (and perhaps incurring psychological costs when husbands oppose their participation) may help to mitigate literacy monitors' drop out rates and frame perceptions of SC/B staff and communities that SC/B provides services rather than hand-outs, development rather than relief. Implementing agencies working with women need to assign economic value to women's time and assess costs women incur when participating in presumably free-of-charge interventions.

In addition, from the perspective of clients or customers, implementing credit is relatively easy compared with literacy interventions. The effort and time costs to women from participating in literacy training are higher than from participating in a credit program and the returns delayed and uncertain. This may in part explain why it is more difficult to implement successful literacy than credit interventions with poor women.

- *Customizing credit and literacy interventions, while costly, is key to maximizing the success of interventions.*

The SC/B case demonstrates the importance and administrative difficulty of customiz-

ing credit and literacy interventions. Ideally, the terms of loans to women agricultural producers should be different than those to women marketing agricultural products. Literacy training should be tailored to different levels of knowledge and ability. Customizing, while costly, is probably key to maximizing the success of interventions.

- *Community participation is an efficient channel to deliver services and to minimize male resistance to interventions benefitting women in traditional settings.*

A last lesson learned from SC/B efforts is that community participation was an efficient channel to deliver services and to minimize male resistance to interventions benefitting women in traditional settings.

SC/B and similar organizations with a child-welfare mandate can improve the responsiveness of their programming to gender issues by increasing men's participation in family health activities. To date, women have been the principal targets of SC/B health work, be it in maternal and neonatal health or child survival. Using the community action cycle, men should be encouraged to explore how they can improve the health of their partners and children. If men increase their health and child-care roles, women's domestic responsibilities will be reduced, thus helping to reduce time constraints to women's participation in productive and reproductive health activities. Conversely, it is important to increase women's participation in SC/B food production and agricultural extension programs, which currently are dominated by men. This would facilitate the successful extension of credit to women borrowers and should increase the success of child survival interventions.

Annex 1 Steps in Warmi Autodiagnosis

Session	Step	Purpose	Methodology
1	1	To ensure that women understand Project Warmi and that they will be invited to participate	Questions to stimulate discussion; short presentation of results from case-control study
1	2	Explore the group members' attitudes regarding pregnancy, birth, and motherhood	Picture cards accompanied by questions to stimulate group discussion and reflection
2	3	To identify and learn about maternal and neonatal health problems and to standardize the terminology used to describe these problems within the group	Role playing, skits, problem picture card games, open questions and group discussions
2 or 3	4	To prepare the group psychologically to think about the problems of other women in the community and motivate curiosity to know what other women think	Group discussion facilitated by questions
3	5	To identify strategies to collect information from other women in the community about their maternal and neonatal health experiences and problems, select a strategy appropriate to the needs of the group, develop the materials, and practice the methodology	Brainstorming on ways to collect information, develop methods that group chooses, role play and practice in pairs using methodology
Between 3 and 4	6	To exchange maternal and neonatal health experiences between members of the group and other women in the community, and to validate that the problems identified by the group reflect the consensus of the community as a whole	Face-to-face interviews in the home
4	7	To ensure that the results of their interviews (quantitative and qualitative) are shared with the other members of the group	Group members present results using "health flag" and "silhouettes" (picture cut-outs) of problems. Group discussion of qualitative and quantitative results
4	8	To reach group consensus on the three most important maternal and neonatal health problems that need to be addressed by the community	Small groups work to prioritize problems using problem cards, present results, participate in inter-group debate to arrive at larger group consensus, and possibly vote
4	9	Evaluation: To see what the women learned from the autodiagnosis and what can be improved for use in future communities	Group discussions facilitated by questions

Adapted from Howard-Grabman (n.d.)

Annex 2 Health Priorities Identified by Groups

Zone	Priority #1	Priority #2	Priority #3
Inquisivi Zone			
Canqui Chico	Retained placenta	Transverse lie	Hemorrhage
Caychani	Too many children	Hemorrhage	Anemia
Chiji	Edema	Anemia	Sepsis
Chuallani	Malpresentation	Hemorrhage	Retained placenta
Corachapi	Prolonged labor	Low birth weight	Sepsis
Ojo de Agua	Too many children	Hemorrhage	Sepsis
Ventanilla	Vaginal infection	Too many children	Hemorrhage
Licoma Zone			
Charapaxi	Too many children	Prolonged labor	Sepsis
Cheka	Retained Placenta	Infection	Hemorrhage
Espiga Pampa	Too many children	Malpresentation	Retained placenta
Lacayotini	Too many children	Hemorrhage	Malpresentation
Licoma	Infection	Anemia	LBW
Pencaloma	Retained Placenta	Edema	LBW
Pulchiri	Malpresentation	Hemorrhage	Edema/LBW
Rica Rica	Hemorrhage	Retained placenta	Malpresentation
Circuata Zone			
Circuata (gp.1)	Edema	Anemia	Hypothermia
Circuata (gp.2)	Tuberculosis	Edema	Hemorrhage
Lujmani	Hypothermia	LBW	Tetanus
Miguilla	Too many children	Hemorrhage	Retained Placenta
Polea	Edema (pre-eclam)	Hemorrhage	Malpresentation
Villa Khora	Hemorrhage	Anemia	Malpresentation
V. Barreintos	Stillborns	Hemorrhage	Infection

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Including Women in Natural Resource Management: CARE/ Guatemala's Women in Development Initiative

Ellen Weiss and
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The village of Tanil, population 2,000, is located in western Guatemala, in the department of San Marcos. In the late '80s, a government representative helped organize a small group of men who began growing tree seedlings in a community nursery to enable them to reforest their land. The group was also taught soil conservation techniques, including terracing and composting. The problem was that the group was composed of only men, and the women of Tanil, who are active participants in critical farm activities--from planting and drying to sorting and storing--were not given the benefit of the government intervention.

Until, that is, CARE began its WID Initiative to increase the number of women benefiting from CARE's Guatemalan agroforestry and aquaculture programs. The WID Initiative promoted women's involvement in the group and gradually, as the number of participants grew to 40 persons, women outnumbered men, representing three-fourths of the total. As part of the WID Initiative, CARE made available to the group seeds for vegetables and small plastic bags to plant tree seedlings. CARE, thus, was able to offer women both the short-term benefits they desired (from vegetable production) and longer term benefits of soil conservation and reforestation intended by the agroforestry project designers.

This group, moreover, survived many negative developments. Despite the fact that the representative from the government forest agency (known as DIGEBOS--Dirección General de Bosques y Vida Silvestre) only had intermittent contact with it, that natural disasters such as drought and too much rain affected the region, and that CARE/Guatemala stopped donating seedlings bags, the group remained committed to agroforestry activities, albeit with fewer members. Six years after the project was begun, members continued to work in the community nursery and practice composting and terracing on their land. In addition, the group diversified its activities and started a carpentry workshop, producing furniture for sale. The group estimates that its efforts resulted in the growth of 250 trees per year, or 1,200 trees over a six-year period.

The case of Tanil is an example of what can be accomplished when a private voluntary organization integrates a concern for women's environmental needs and interests into its environmental and agricultural programs.

The Role of Women

Rural Guatemalan women are similar to women throughout Central America in that their livelihood is inextricably linked to the availability of forests, farm land, and water. In fulfilling both their productive and reproductive roles, women, particularly in highland areas, depend on nontimber forest resources, adequate soils for growing subsistence and cash crops, and uncontaminated water for consumption and agro-husbandry use. Due to the great environmental and ethnic diversity in Guatemala, the specific uses of natural resources by women vary significantly depending on geographical region and cultural group.[1] Nevertheless, there are enough commonalities to identify some basic patterns of women's uses of natural resources (Bossen 1984).

Any discussion of Guatemalan women's use of environmental resources must begin with their contribution to the subsistence activities of small farms. In Guatemala, 80 percent of the farms are less than one hectare, producing mainly subsistence grain crops. Animal husbandry is also an important activity. Women actively participate in a wide range of production and processing activities on these farms, a fact that has escaped official recognition since national accounting principles exclude the subsistence sector, resulting in a general underreporting of women's contributions to the agricultural sector. In poor indigenous and Ladino communities that continue to rely on subsistence farm production, women collect

[1] The Indian population, comprising roughly half the total, is divided into four large and over a dozen smaller Mayan linguistic groups, with smaller populations of Garifuna and Xinca descent. The remainder of the population, comprised of white or mixed heritage, is called "Ladino".

fodder, wild plants for food and medicine, and wood for fuel from forests—in addition to fulfilling domestic tasks such as grinding corn for tortillas, weaving, washing clothes, and hauling water. Women's contributions to agriculture include planting potatoes, beans, vegetables, and, in some communities, maize. Where taboos prevent women from planting maize, such beliefs do not restrict them from harvesting and processing maize. In addition to their roles as direct producers, women are typically responsible for drying, cleaning, sorting and storing crops, as well as for food preparation. Finally, indigenous and Ladino women sell crops in local markets, earning income that is used to purchase supplemental food items and to pay for other daily household expenses (Bossen 1984).

Women's traditional agricultural roles on subsistence farms in Guatemala are expanding to include the production and processing of recently-introduced, non-traditional export crops such as snowpeas, broccoli, and cauliflower. As small farms expand their production of these cash crops, women are increasing their labor contribution to both on-farm production and off-farm processing, the latter through employment in local packing and processing plants (von Braun, Immink, and Hotchkiss 1987; Blumberg 1985). Women's expanded involvement in non-traditional export crops has resulted in an increase in the share of women's contribution to overall household farm income. However, by shifting part of their labor from traditional crop production to non-traditional export crop production, women may be foregoing income derived from the sale of traditional crops at the local markets. Income derived from their labor in the production of the export crops typically accrues to men, and not to the women (Blumberg 1985; von Braun, Immink, and Hotchkiss 1987). This loss in women's personal income may pose an additional constraint on women as they generally use the income to supplement their household needs. With less income at their personal discretion, women may find themselves even more dependent on the effective use of natural resources to meet family needs.

A Declining Resource Base

Guatemalan women's subsistence and cash crop production activities are dependent on a natural base that is being depleted at an alarming rate. The loss of forest cover has a direct effect on women's collection of nontimber products (plants and fuelwood), but can also indirectly lead to increased soil erosion and scarcity of water that affects farm production. Deforestation, pasture overgrazing, and inappropriate agricultural practices also contribute to watershed degradation and loss of biodiversity. Forests, which cover 37 percent of all land in Guatemala, are being depleted at an annual rate of two percent, a significantly higher rate than the average of 0.6 percent for Latin America as a whole (WRI 1992). Between 1975 and 1985, around 800,000 hectares of forest in Guatemala were converted into cropland, pastures, or used for commercial logging and fuelwood production, most of the latter designated for commercial use (WRI 1992). Recent projections for Latin America show that by the year 2000 between 30,000 to 100,000 tropical species may be lost due to loss of habitats (IDB/UNDP 1990). In 1989, at least 27 known species in Guatemala were endangered (WRI 1992).

It may be assumed that women's involvement in agricultural activities increases as a result of converting forests to croplands. However, women face a number of sociocultural constraints that restrict their access to this land and/or the land may be in areas unsuitable to sustainable agricultural production. For example, forest land is being cleared for pastures for export production, an economic sector that has traditionally excluded women. Similarly, logging for fuelwood is mainly a commercial enterprise and does not enable rural poor women to meet their own consumption needs for domestic energy. And the loss women are

experiencing in available fuelwood is not being alleviated by reforestation efforts. In Guatemala, for every 100 hectares cut only nine are reforested, far below the regional average (WRI 1992). Loss of soils suitable for sustainable agricultural production poses an obvious threat to agriculture. In Guatemala and other Central American countries during the early 1980s, 30 percent of potentially cultivatable land was lost to soil erosion (WRI 1992). Problems of soil erosion have been exacerbated by overuse of fertilizers and pesticides to boost production in the agroexport sectors, resulting in further decline in long-term soil fertility (WRI 1992). Partly as a result of the decrease in soil quality, during the 1980s yields of basic food crops in Guatemala declined by up to 45 percent and those of export crops by up to 10 percent (Arias 1992). This decline in yields occurred even though croplands increased by 10 percent in Guatemala between 1975 and 1985. Unfortunately, much of this expansion was into marginal areas where rapid declines in soil quality undermine agricultural practices.

Watershed degradation, mainly due to deforestation, causes increased water runoff, flooding, and buildup of silt in irrigation systems, all of which can lead to increases in women's domestic and farm work. Of great concern are water pollution and an inadequate water supply infrastructure for providing potable water. In 1985, only 39 percent of Guatemala's rural population had access to safe drinking water (WRI 1992).

Women's Poverty and Low Status

The above environmental problems confronting Guatemala affect both women and men, particularly if they are poor. Despite the vital interest the poor have in conserving their natural resource base, poverty frequently imposes survival strategies that may contribute to environmental degradation. Widespread and growing poverty among the rural poor, a remnant of the harsh economic realities of the declining economic opportunities during the late 1970s and throughout most of the 1980s, have increased the demands on the natural resource base. The reduced ability to purchase agricultural inputs, such as fertilizers and high-yield seeds, have forced many farmers to turn to unsustainable farming practices to meet the demand for agricultural products. That women in Latin America are particularly vulnerable to poverty is best reflected by the fact that during recent national and regional recessionary conditions women's share of poverty increased from 52 percent in 1965 to 54 percent in 1988 (Jazairy, Alamgir, and Panuccio 1992)[2]. Even though men face many of the same constraints in their use of natural resources as do women, women face additional constraints due to economic and sociocultural conditions, which restrict them from either shifting their demands on the natural resource base to other resources or adopting more efficient and sustainable uses of natural resources. Because women have greater difficulty in obtaining extension services, women typically lack the skills needed to properly utilize alternative resources.

In Guatemala, CARE promoted women's involvement in its agroforestry program.

It is estimated that in 1990, only 9 percent of Guatemalan women were economically active

[2] Percentages reestimated by ICRW, 1994.

(United Nations 1991). While these numbers most likely underestimate actual economic activity, the low percentage of female participation reflects the barriers women face in engaging in employment, which would allow women to shift their dependence away from a diminishing natural resource base to other sources for their food and fuel.

Sociocultural norms also limit women's access to relevant information that can impact upon their productive activities, such as the availability of sources of energy other than fuelwood and more effective planting techniques. Many indigenous women in Guatemala are monolingual, speaking only a Mayan or other Indian language, which restricts their interaction with Spanish-speaking extension agents. Illiteracy also limits women's access to information. In 1980, almost 70 percent of all rural women were illiterate compared to 50 percent of rural men. It is estimated that in 1990, 53 percent of all Guatemalan women were illiterate compared to 37 percent of men (United Nations 1991).

Finally, the hardships that rural Guatemalan women face in general are exacerbated in the case of female headed households. In 1987, female headship in the rural areas stood at 11 percent of all rural households (FLACSO 1992). As the sole providers for their families, women's access to the natural resource base is crucial to family well-being.

The degradation of the natural resource base has significantly affected the lives of poor rural women in Guatemala. While both quantity and quality of the natural resource base have declined, the dependence on this resource base has increased for the rural poor. However, the additional social and economic constraints facing rural women in Guatemala have made these women even more dependent on environmental resources.

In recent decades the government and nongovernmental organizations (NGOs) in Guatemala have launched agroforestry, soil conservation, integrated aquaculture, and sustainable agriculture programs targeting the rural poor. Until recently these natural resource and development initiatives did not recognize women's environmental needs and their interests in conserving natural resources. This situation is beginning to change both in Guatemala and throughout Central America (Paolisso and Yudelman 1991). The WID Initiative of CARE/Guatemala described below is an example of an effort by a NGO to integrate a concern for women's environmental needs into its environmental and agricultural programs.

CARE/Guatemala's WID Initiative

In response to the growing problems of deforestation and soil erosion, CARE initiated an agroforestry program in the mid-1970s in coordination with the U.S. Peace Corps and the Dirección General de Bosques y Vida Silvestre (DIGEBOS), the forest agency of the Guatemalan government. The aim of the program was to assist smallholder farmers to optimize the use of renewable natural resources—forests, water, and soil—in a rational and sustainable manner. The program's strategy consisted of organizing smallholder farmers into community-level forestry committees and providing these committees with technical assistance to establish nurseries and conduct soil conservation activities on a self-sustaining basis.[3]

By 1988, the program was reaching nearly 14,500 smallholder farmers in 370 communities located throughout 14 departments in Guatemala.[4] However, a program-wide survey conducted that same year revealed that only 11 percent of agroforestry program participants were women. The survey also showed that barely one-fourth (91) of the 370 organized community groups included women members.

[3] CARE's Agroforestry Program has continued operation since the WID Initiative and is now one of five subprojects within CARE's Division of Agroforestry and Environment.

[4] Data on CARE's Agroforestry and Integrated Aquaculture Programs, and the WID Initiative were obtained from interviews with CARE/Guatemala staff and from the following project documents: WID Initiative Work Plan for the Aquaculture and Agroforestry Programs; WID Initiative Agroforestry and Integrated Aquaculture Programs Mid Term Progress Report; and Evaluation of the WID Initiative in CARE Guatemala's Agroforestry and Integrated Aquaculture Programs 1988 to 1990.

These 91 groups had a total membership of 4,783 participants of whom 34 percent (1,647) were women. While survey data indicated that women were involved in establishing nurseries, producing seedlings, and making compost bins, their participation in project demonstrations and in nursery committees was not equal to men's and not proportional to their labor input in agroforestry activities.

A similar survey was conducted in 1988 of women's participation in CARE's Integrated Aquaculture Program. Working in conjunction with the Peace Corps and the Dirección General de Servicios Pecuarias (DIGESEPE), the national livestock services agency, the CARE program (also begun in the mid-1970s) targeted subsistence level farm families for adoption of integrated aquaculture systems that included fish culture, small animal husbandry, and vegetable gardens.[5]

At the time of the survey, the program was reaching approximately 1,000 subsistence level farm families. Survey results revealed that women from all 302 communities where the Integrated Aquaculture Program was operating were participating to some extent in program activities. Not surprisingly, participation was highest in pond and livestock management since women tended to be at home taking care of the children and the animals while the men generally worked in the fields or outside the home. The study also showed that when the extensionist or promoter visited a family it was the women whom they frequently encountered, and, consequently, who received the technical assistance directly. On the other hand, the program's formal training component was targeted at men and generally involved few female participants.

Objectives of the WID Initiative

In October 1988, with a grant from USAID/Guatemala, CARE began an initiative to increase the number of women benefiting from each of CARE's Agroforestry and Integrated Aquaculture Programs in Guatemala. The 18-month Women in Development (WID) Initiative was designed to be an integral part of the two ongoing programs which were operating in a combined total of 97 largely rural municipalities in Guatemala.[6] The specific objectives of the WID Initiative were:

- to find out women's needs, interests, and constraints to participation in the two programs;
- to increase the number of women involved in program activities;
- to increase women's level of knowledge and skills in agroforestry and integrated aquaculture by means of culturally appropriate training and extension practices;
- to increase women's access to resources; and
- to monitor program progress and evaluate the strengths and weaknesses of the key strategies of the Initiative.

The ultimate goal of the WID Initiative was to demonstrate the importance of integrating women as participants and beneficiaries so that CARE and the government agencies would adopt these objectives in the longer term. The key strategies employed to reach out to women were information gathering, field staff orientation and training, and the establishment of mechanisms for technical support and resource delivery.

[5] CARE's Integrated Aquaculture Program ended in 1990.

[6] Mainstreaming can be broadly defined as integrating WID/gender concerns into existing development activities. It is important to distinguish here between CARE/Guatemala's intent to "mainstream" WID concerns as is implied by making the Initiative an "integral" part of these programs and the effectiveness of doing so. We raise this point because when CARE/Guatemala decided to terminate the Initiative, the stated reason was to mainstream WID concerns. In fact, as will be shown later, our research found that the WID Initiative cannot be characterized as an example of mainstreaming but rather as a demonstration of the value of successfully targeting women within a larger project until the conditions for effective mainstreaming can be met. These conditions include widespread commitment, capacity, and actions within an organization to address women's needs and concerns (see Buvinic, Gwin, and Bates 1996; and Razavi and Miller 1995).

Information Gathering

An important premise guiding the design of the WID Initiative was that women's participation in the two programs would increase and their role would expand if the activities offered responded to women's perceived needs, built upon their abilities and potential, and minimized certain social and economic factors constraining their participation. As a first step, therefore, it was necessary for program staff to determine women's needs, interests, and constraints to participation. This was accomplished by means of a diagnostic survey which was administered to a purposive sample of 160 women who lived in communities where both the agroforestry and integrated aquaculture programs were operating. The survey included questions about women's household responsibilities and other time constraints, priority activity interests as well as what they considered as limitations to participating in the two programs along with their preference for group or individual models of organization.

In addition to the diagnostic survey, data were collected at baseline and during the course of the Initiative from 32 participating community level groups. A monitoring data base was created in order to track each group's progress towards its particular objectives. Data were collected on the levels of group participation and organization, length of time the group worked together, quality of field staff support, degree of development of the group's chosen activity or activities, amount of income generated from WID sponsored enterprises, and the expansion and diversification of group activities. As part of the methodology, CARE staff made visits to 12 randomly selected groups at the end of the Initiative to interview group leaders and members about their experiences, and to evaluate the extent to which they had reached their goals.

Training in Gender Sensitivity

Together, the agroforestry and the integrated aquaculture programs operated with 190 field staff that included CARE extensionists, Peace Corps volunteers, and DIGEBOS and DIGESEPE government promoters. Prior to the WID Initiative, survey data showed that field staff, almost all of whom were male, had not made a concerted effort to address women's needs and concerns and integrate them into program activities. For that reason, a special training component in gender sensitivity for field staff was implemented in an effort to change entrenched attitudes toward women and provide skills to engage women in program activities.

To carry out the necessary training and orientation, CARE hired a WID Coordinator who worked closely with the project managers of CARE's Agroforestry and Integrated Aquaculture Programs. The WID Coordinator played a critical role in developing and implementing the training component, as well as the other key strategies. The Initiative also hired a half-time agronomist and a part-time consultant in ornamental plants to address gaps in technical skills of the field staff. By means of workshops and meetings, including monthly regional meetings, field staff were oriented to the objectives of the WID Initiative, trained in technical and group organizational skills, notified about the availability of funds and materials for WID activities, and given guidelines on how WID groups could gain access to and use of those funds and materials.

Delivery of Technical Assistance and Resources

According to results from the diagnostic survey, women overwhelmingly preferred to carry out program activities in groups rather than individually. Therefore, the WID Initiative organized new women's groups and promoted women's involvement in groups that were already established. These groups operated as a vehicle for identifying members' specific interests and goals, for formulating requests for assistance from CARE, for implementing activities, distributing benefits, and sustaining activities over the longer term. Technical

assistance from CARE and resources (loans and donations of seeds, tools, and materials) available for WID activities were then channelled to participants.

Program Accomplishments

In a very short period of time the positive results of the Initiative became apparent. Not only was there increased participation by women in programs, but the benefits to women from this participation was obvious in terms of skills, knowledge, and access to resources.

Increased Participation

By January 1990, 16 months after the start of the Initiative, the number of women involved in agroforestry activities had increased by more than 50 percent (see table 6). This increase was not limited to the expansion of female membership in a small number of existing groups, but was distributed over a large number of project sites.

Although similar comparisons of women's participation in the integrated aquaculture program cannot be made because records were not kept by gender prior to the Initiative, the number of women's groups receiving resources and technical assistance from the program went from 0 to 22 during the course of the Initiative. Prior to WID there was no attempt by the aquaculture program field staff to provide organized training for women. Data collected at the end of the Initiative showed that more than one-fourth of the training provided went to women. Moreover, it was estimated that 32 percent of all extension advice provided during the course of the Initiative was directed at women.

Increased participation by women in program activities can be attributed to the following factors:

- *Women were given the opportunity to select from a varied menu of program offerings.*

According to baseline information, about two-thirds of women surveyed contributed up to one-half of their household's cash and non-cash budget and 13 percent were their family's sole source of support. Given their productive roles in the family, it was not surprising to learn that women were most interested in short-term activities yielding either income or food for household consumption, as shown in the chart on this page. The preferred activities also tended to be those which could easily be located in or close to the household compound, and thus did not conflict with women's other domestic responsibilities.

In response to this information, the WID Initiative expanded the number and type of activities traditionally offered by both programs. For example, the agroforestry program had previously concentrated on promoting nurseries, re-forestation, and soil conservation to its beneficiaries while the Integrated Aquaculture Program stressed fish ponds. The WID Initiative enabled organized groups to become involved in a variety of other activities including animal

Table 6 Changes in Women's Agroforestry Program Participation 1988-1990

	Before WID	After WID	Percent Change
Number of Women Participants	1647	2505	52%
Percent of Total Program Participants	11	14	27%
Number of Groups with Women Members	91	139	53%
Percent of Total Program Groups with Women Members	25	32	28%

Women's Expressed Activity Interests

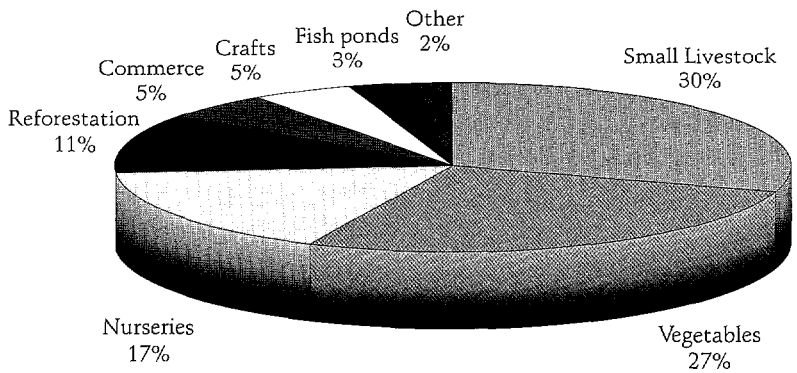

Table 7 Number of WID Groups by Activity Selected

Activity	Number of Groups
Broilers	12
Pigs	10
Forest Nurseries	10
Vegetables	6
Flowers/Ornamentals	6
Layers	4
Potatoes	3
Soap	2
Rabbits	1
Fish	1
Fruit Trees	1
TOTAL	**56**
TOTAL NUMBER OF WOMEN PARTICIPANTS	**1123**

husbandry and vegetable production. As shown in table 7, the majority of a sample of 56 WID groups chose activities not traditionally offered by both programs.

- *Field staff were required to establish goals for involving women in program activities.*

With the advent of the WID Initiative, field staff were mandated to establish targets for involving women in program activities. Upon submission of their monthly reports, the project managers questioned field staff as to whether they were reaching their targets. This pressure to reach their monthly goals likely contributed toward the efforts of some field staff to involve women. As the two CARE project managers directed the activities of the CARE extensionists and had some managerial oversight of the Peace Corps volunteers and the government promoters from DIGEBOS and DIGESEPE who were involved in the projects, this pressure could be exerted on all staff involved.

- *Substantial time and effort were invested in field staff orientation, training, and support.*

Many field staff, particularly the government promoters, were not initially enthusiastic about actively including women in project efforts and taking on additional responsibilities related to the new activities not previously offered by their respective programs. They were used to working with male participants and felt more comfortable in a male-oriented extension setting. The WID Initiative thus focused on orienting field staff as to the potential of women in agricultural development activities and provided them with specific organizational and interpersonal skills that would enable them to work with female or mixed male/female groups. The meetings and workshops conducted with field staff from all regions in Guatemala focused on exploring the constraints to working with women and on identifying opportunities to engage their participation. These sessions were well attended and, for the most part, favorably evaluated by participants. Besides formal meetings and workshops, field staff also participated in site visits to communities to see firsthand how successful WID groups functioned.

While a number of male promoters were opposed to working with women from the beginning, and continued to be so during the course of the Initiative, the WID Coordinator reported that many of the field staff developed a preference for working with women because they tended to be more organized, respectful, and responsive to field staffs' ideas than men.

- *Backstopping and technical support were provided by the WID Coordinator and other CARE staff.*

In response to the training and the need to meet their monthly goals, field staff began to approach the WID Coordinator for help in promoting women's participation in program activities. This backstopping by the WID Coordinator proved to be crucial for fostering women's participation because field staff often needed individual guidance in how to work with women via women-only or mixed-sex groups. Besides providing direction to field staff, the WID Coordinator often gave talks to women

themselves that were part technical and part consciousness-raising. Often, other issues arose for discussion outside of those related to agroforestry or agriculture--topics such as abuse by men, lack of control of household resources, and family planning. These discussions helped to solidify the group's organization and its commitment to program participation.

The provision of technical support by the WID Coordinator and other CARE staff was also important for developing the technical capacity of field staff to assist WID groups to carry out income-generating activities and credit management—components not previously offered but most likely responsible for attracting some women to participate in the programs.

Increased Levels of Knowledge and Skills

Data collected prior to the WID Initiative indicated that almost two-thirds of women involved in program activities had never participated in formal training provided by field staff. The WID Initiative offered them the opportunity to participate in formal training on topics of interest to them as well as enabling them to receive extension services on an ongoing basis and in a manner that was sensitive to women's schedules and household responsibilities.

A training activity that was particularly well received by women was visiting other organized groups. The WID Initiative arranged for transporting a number of women from women-only or mixed-gender groups to a different community to learn from others' experiences. For example, women from a group in Sumpango in the department of Sacatepeque visited the WID group in La Barreal whose members had used money from the sale of forest seedlings to purchase their own land for a nursery. Upon return to their community, the women of Sumpango began to sell grafted plants, a technique that they learned from the government promoter assigned to their community. One year later they had enough money to purchase two *cuerdas* of land which they used to plant beans and vegetables that were sold in Guatemala City.

Regional workshops for community leaders also were popular. Three regional workshops were held for women who played pivotal decision-making roles in their groups. Approximately 50 women leaders attended at least one workshop which provided intensive training on technical matters and group process and organization. Almost all field staff participated in at least one regional workshop, which helped to strengthen the bonds between themselves and the women's groups.

Program-assessment visits by CARE staff to the 12 WID groups conducted at the end of the Initiative to assess their progress provided an idea of the degree to which technical knowledge and skills had been successfully transferred to group members. Although it was found that one-third of the groups were not yet capable of carrying out the activities they selected on their own, two-thirds of the groups had mastered some or all of the basic skills necessary to conduct their chosen activities, despite the Initiative's short time frame and the fact that working in groups was a new experience for many individuals.

Increased Access to Resources

Results from the diagnostic survey showed that 35 percent of respondents identified the lack of land and money as major obstacles to greater involvement in program activities. In addition, 17 percent of respondents mentioned the lack of time and household responsibilities as constraints to participation. The WID Initiative attempted to alleviate shortages in the three elements of production—land, labor, and capital—in a variety of ways.

As discussed above, lack of adequate land is a serious problem affecting Guatemalans, 80 percent of whom own less than one hectare of land. Data from the WID baseline survey showed that only 16 percent of groups had

access to small amounts of land. To address land limitations, the WID Initiative assisted some groups in securing the donation of private or public land for nurseries, and by teaching soil conservation practices and providing tools to improve marginal holdings. A few groups were able to use the profits from selling tree seedlings or grafted plants to buy land for nurseries or cultivation. For the most part, however, women's lack of land influenced their selection of activities. Small livestock raising was a particularly popular activity among WID groups, most likely because of low land requirements.

The WID Initiative attempted to address women's time constraints by offering activities that could fit easily into their daily household tasks, such as raising poultry or pigs. Despite women's limited time resources, some women did elect to participate in more labor-intensive activities such as nursery work or cash cropping. Results from the Initiative indicated that lack of time was not a significant constraint when women perceived that their participation would result in tangible benefits. Women, however, did experience labor bottlenecks during certain hours of the day when conflicting responsibilities prevented them from participating in program activities. It was, therefore, important for field staff to be conscious of such bottlenecks when advising groups on activity selection.

To address capital constraints, CARE donated key resources such as tools, vegetable seeds, small livestock, and vaccines to WID groups. Donations helped women to experiment with new technologies without undue financial risk. Donations also helped groups take on projects with both long and short term benefits. For example, some agroforestry groups received tools, seeds and materials to grow flowers, ornamental plants, coffee and fruit saplings, in addition to standard forestry seedlings which take considerably more time to produce benefits, such as wood for fuel.

Based on the activity selected, field staff formulated requests for donations that were reviewed and approved according to established criteria. In most cases, the materials were given to the group—and not to individual participants—to be used by the group or shared among members on a revolving fund basis. The main criteria guiding approval of requests for donations were the following:

- The proposed activity had to include women and respond to their stated needs and goals;
- Women had to be willing and able to participate in group activities such as training;
- Adequate technical supervision and skills training had to be planned and coordinated by field staff;
- The activity needed to have clearly stated objectives and specify a timeframe for achieving them;
- Field staff had to be willing to collect the information necessary for monitoring and evaluating the project;
- Field staff had to take on the responsibility of overseeing the implementation of activities at the community level.

Besides donations, it was clear from the results of the diagnostic survey that investment income would be needed to help women raise animals or grow cash crops as a means to increase household income or improve family nutrition. Thus, a credit component was added to the program activity offerings, although it was not originally included in the work plan for the WID Initiative.

In order to access credit, field staff, in coordination with each organized WID group, prepared a short economic feasibility statement. Field staff also made a commitment to provide the necessary technical and organizational support to the groups. Loans were made to

organized WID groups on the condition that the principal plus a one percent monthly interest charge be repaid within a set time period. The length of the loan reflected the type of activity for which the loan was secured: loans for raising broilers or growing cash crops were for about six months whereas loans for pig breeding were for 14 months.

As a whole, the credit scheme was successful in meeting women's demand for credit. Thirty-four groups requested and received loans during the WID Initiative. The credit component was also successful in terms of loan repayment; 32 groups repaid the amount in full, thus indicating good group discipline and organization. The credit component also provided an opportunity for women to learn new skills in production, financial management, and group organization—skills that can be built upon through subsequent CARE or other NGO or government programs in small enterprise development.

Loan repayment, however, is only one indicator of success of the enterprise development initiatives of the program. When the source of the loan repayments was investigated it was found that only one-half of the repayments were made using capital generated by the group's selected activity. While for some groups, loan repayments were due before the activity could generate adequate returns, for others, the group had to repay the loan from savings because the enterprise did not yield adequate returns. While the flexibility of the WID Initiative allowed for the incorporation of a much needed credit component, credit extension did not necessarily promote economic viability of the enterprises, despite high repayment rates. An economic analysis of four of the small livestock income-generating activities (pig raising, pig breeding, broilers, and layers) revealed that the daily monetary return on investment was very low and the reinvestment potential of the activities was very modest. Therefore, income generated from the activities was spent on household consumption and was not available for reinvestment. Similarly, income invested in a subsequent production cycle greatly reduced or eliminated funds available for immediate household purposes.

Perhaps if the WID Initiative had undertaken regional market studies prior to offering income- generating activities and had identified cheaper sources for inputs, the financial outcomes of the activities might have proven to be more favorable. Credit and income generation activities were completely new areas for the

Some of the residents of the village of Tanil stand proudly near the seedlings in the community nursery.

program field staff. The Initiative provided an opportunity to raise field staff's awareness of the importance of credit and income generation for women and to develop their skills in providing technical and managerial support in these activities.

Long-Term Impact of the Initiative: Successes and Challenges

The WID Initiative was successful in meeting its objectives, namely increasing women's participation in program activities, improving their knowledge and skills, increasing women's access to resources, and expanding their role in the agroforestry and integrated aquaculture programs. Although the WID Initiative focused technical assistance and resource delivery on 64 groups made up primarily of women, in fact, by the end of the project period close to 300 women's and mixed-sex groups had been formed as a result of field staff efforts. The Initiative's central focus on women served to create awareness at the institutional and community level of women's productive roles and economic contributions to the household. This awareness of women's worth and value encouraged women to speak out more in mixed groups, take advantage of training opportunities, participate in the decision-making process, and assume a more active leadership role.

Key factors that contributed to the Initiative's success included the following:

- It made available funds "earmarked" for women, designated WID staff, WID training for staff involved in other aspects of the project, and mandates to expand outreach to women.

- It offered women a range of activities to choose from which were tailored to match their interests, and was flexible enough to incorporate needs not anticipated in the original project design--such as the organization of a credit component.

- It used a variety of approaches (such as workshops, technical support and backstopping, and establishment of monthly targets) to motivate and train field staff to engage women in program activities.

- It was responsive to women's economic needs and time constraints.

Despite its successes, however, the Initiative faced a number of obstacles that have implications for ongoing and future efforts. At the community level, field staff faced the challenges of illiteracy and innumeracy. The inability of participants to keep records of group decisions and/or cash flow transactions limited participants' ability to manage credit, marketing, and benefit-sharing effectively. Although there was no correlation between illiteracy or innumeracy among group members and failure of group projects, such a situation created a dependency upon the field staff for keeping group records and accounts.

Another challenge was that of group organization. Group dynamics varied considerably among WID groups. Pre-existing groups generally had more success than those newly formed. Another factor was that in certain (particularly non-Indian) areas of Guatemala, women do not have a history of group projects. While these women may have enjoyed working together, they did not have experience in how to develop a project as a group. There was a tendency to seek individual versus collective benefits. The group decision-making process was not successfully adopted in these settings and led to poor selection of activities, resentment, and low participation levels. The group decision-making process was also affected by differences in religion and marital status among group members. These differences, when they occurred, contributed towards instability and tension within the group.

There was no evidence to indicate that

women's groups were more successful in carrying out their selected activity than mixed-sex groups (approximately 40 percent of the groups targeted by the WID Initiative had male members). But comments from field staff indicated that women's groups were more likely to foster self-confidence and leadership among women participants than mixed sex groups.

The WID Initiative provided important lessons about factors that contribute to the successful integration of women into community-based environmental and agricultural projects. These findings have important implications for field staff engaged in current and future efforts.

Beyond the Initiative

In June 1990, CARE/Guatemala made a conscious decision not to extend the WID Initiative. According to CARE staff involved in the Initiative, the principal reason for terminating what was widely seen as a successful and important project was the belief that efforts to reach women should be mainstreamed directly into CARE's sector programs. Rather than have a separate WID Initiative, it was decided after significant discussion and some objection, that a more effective and sustainable approach would be to integrate gender within CARE's ongoing Agroforestry Program. As one staff member pointed out, the Initiative had helped staff obtain a comprehensive view of the roles and needs of women and of how to address those needs in agroforestry and other sectors. This knowledge had been missing prior to the WID Initiative but as a result of it, CARE staff members felt they could be more responsive to women (and men) by assuming responsibility for gender issues within their own program activities.

There were additional programmatic reasons for mainstreaming WID rather than focusing on women via just one project. First, it was operationally difficult at the community level to separate project resources and allocate them separately to women and men. Second, some promoters and participants felt that targeting women separately, reinforced by mandates to increase women's participation, forced an unnecessary and possibly disruptive distinction between men and women. They felt that special project funds for women were no longer necessary. Rather, they felt women's integration into on-going project activities should be based on their expressed needs rather than pre-determined by organizational mandates.

It is difficult to assess the long-term impacts of the WID Initiative on CARE/Guatemala's ability to address WID issues because of the number of changes that have occurred in the past five years both within CARE and in Guatemala. Nonetheless, some effects are readily discernible. There is a strong consensus among staff that a critical contribution of the WID Initiative was to establish a baseline of information that helped guide the integration of women into the two projects. The Initiative also established a historical precedent for addressing gender issues that CARE/Guatemala has since built upon. For example, project activities now use information and educational materials that show both men and women involved in the target activities, committees have been established to help identify and address gender issues across projects, and more women have been hired by CARE/Guatemala, a particularly important development in the traditionally male-dominated field of agroforestry and natural resource management. It is, however, important to note that women's participation rates in CARE/Guatemala's agroforestry sector are estimated to be 13 percent as compared with 14 percent at the end of the WID Initiative. As mentioned earlier, prior to the Initiative, women's participation rates had been about 11 percent.

A number of explanations may account for the leveling off of women's participation, including some that are internal to CARE/Guatemala as an institution, while others are external and involve the changed socioeconomic situation in Guatemala. Externally, financial

constraints have forced DIGEBOS to reduce the number of community-based promoters and to cease operations in certain areas where the WID Initiative had been successful. Internally, an important factor may be the lack of an incentive now that there is no longer a mandate requiring field staff to set specific targets to increase women's participation. Also, a key component that gave women an incentive to participate was the project's willingness to provide what women wanted--a varied menu of activities, including a wide range of farm and off-farm subsistence and market activities. This has been replaced by a more standard set of agroforestry activities emphasizing reforestation and watershed protection. Given many women's pressing needs for food or income, it is possible that women consider it too costly in terms of time spent and income lost to participate exclusively in agroforestry and soil conservation activities. It is also possible that women are more involved in CARE's other activities, such as its Village Banking Program, which better meets their needs.

Among the factors external to CARE/Guatemala that may have contributed to the stagnation in women's participation on the agrofrestry projects, the most prominent is the lack of willingness of government counterparts to address WID issues. As described earlier, CARE/Guatemala's programs are implemented using government promoters at the community level. In the case of agroforestry, CARE/Guatemala has been working with DIGEBOS. CARE/Guatemala's staff were consistent in their opinions that one of the biggest obstacles to integrating women in their projects is the strong bias at DIGEBOS toward focusing on men in agroforestry. In Guatemala and many other countries in Central America, sectors such as forestry, agriculture, and natural resource management are perceived as men's work. This male bias creates two problems for CARE/Guatemala in implementing gender integrated agroforestry projects. First, the lack of commitment by senior level staff in DIGEBOS to integrating women makes it difficult to require field level promoters to be more gender aware in their work. And second, field promoters themselves, who are almost exclusively men, do not recognize the need to integrate women, and thus are not seeking CARE/Guatemala's assistance in developing innovative programs to resolve any gender-based constraints women face. As long as the WID Initiative provided gender training, targeted women, and mandated resources for women, resistance of government staff could be overcome. Once it was terminated, staff did not feel obligated to address gender issues. Given the notable success in the short time the WID Initiative was in place, it is not unreasonable to speculate that given more time the impacts may have been more enduring.

Lessons Learned

A number of important lessons emerged from CARE/Guatemala's WID Initiative:

- *A well-conceived and implemented add-on to a development project can successfully integrate women as participants and beneficiaries, have an important demonstration effect, and function as a training ground for staff to acquire skills and knowledge in WID.*

WID training, the experience of working with women "on the ground," and better communication about women's roles and needs can make a difference in development project staff's responsiveness to women's needs and concerns. These were the most valuable contributions of the WID Initiative to CARE/Guatemala's programs.

- *The diagnostic data collection exercise, undertaken at the start of the WID Initiative, was invaluable in identifying women's needs and in establishing a baseline for future monitoring and evaluation.*

The data collection also functioned as a critical input into the project implementation process because it showed that the women surveyed considered economic survival their primary concern. CARE's willingness to modify project design to accommodate women's requests for assistance with income- and food-production and to provide financial credit was instrumental in generating women's interest and participation.

- *Mainstreaming WID must be correctly timed or it will not be effective; premature mainstreaming will result in continued neglect of women in development projects.*

While mainstreaming WID is a desirable long-term goal in development, it is not sufficient to ensure that WID issues will be addressed. Necessary conditions to make mainstreaming effective include widespread organizational commitment to integrate women into all aspects of project design and implementation, knowledge and skills among staff and decisionmakers to address WID issues, adequate funding and other resources, such as time, to allocate to WID, and staff accountability.

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Raising AIDS Awareness: CNE and Laubach in Thailand

Charlotte Johnson-Welch
and Rekha Mehra

On a balmy December evening, at the end of a dirt road in a Chiangmai slum, a group of women are seated on mats on the floor, waiting to demonstrate what they have learned about the AIDS virus and their vulnerability to it. The women are of all ages, some accompanied by small children. A few men sit on chairs at the entrance to the discussion area, carelessly observing the proceedings. They seem to be aware of what is likely to go on and, therefore, not particularly interested.

Project staff begin discussions with the assembled women gradually introducing an exercise. The women are asked to collectively develop a list of the varieties of occupations represented in the community—truck drivers, housewives, students, prostitutes—and to rank each group according to their perceived risk of contracting HIV. The women are given beans to drop alongside each group listed, varying the numbers of beans to reflect greater and lesser degrees of risk. When the beans are tallied, prostitutes rank highest in risk, receiving 40 seeds while housewives with 7 seeds rank relatively low. When asked if they think this ranking accurately reflects reality, most seem certain that it does. They are then asked to draw lines between the groups to show who relates to whom sexually and, based on the connections established between prostitutes and various men's groups, and between the men and the housewives, the women are asked if they need to revise their previous rankings. They feel they should and they do. The second round of AIDS risk rankings raises the housewives' vulnerability to 19 points. They thus establish their personal risk of HIV infection (see also, Ivers 1993).[1]

Through participatory processes such as these, the Women's Empowerment Group (the WE Group), the Faculty of Education at Chiangmai University (hereafter, the Faculty) and the Chiangmai Provincial Centre for Non-Formal Education (hereafter, CNE) are attempting to educate, inform, and sensitize communities of slum-dwellers and itinerant construction workers in Thailand to the dangers of HIV/AIDS and the importance of adopting low-risk behaviors. The WE Group consists of a small number of individuals from the CNE and Chiangmai University who came together informally in 1987 to promote literacy and community development in Chiangmai Province. Members of the WE Group work collaboratively with the Faculty and the CNE, drawing upon their resources and staff to implement projects such as the AIDS Awareness Project.

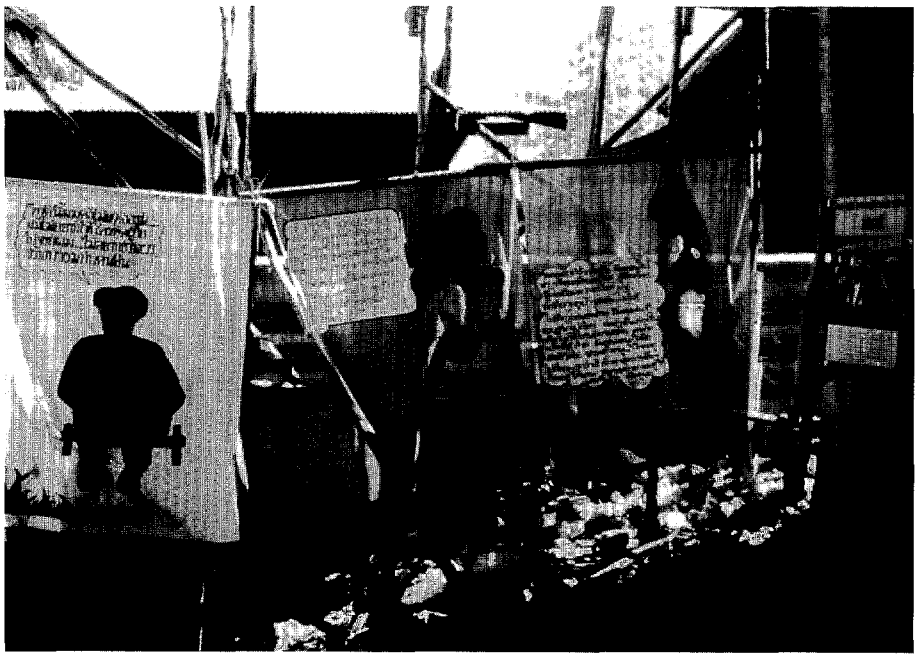
The AIDS Awareness Project, started in 1992, was a follow-on to two earlier WE Group activities: one that attempted to stem the out-migration of young rural women to urban areas, and the other, a women's empowerment project. Aware that rates of HIV infection were growing rapidly in northern Thailand, the WE Group initially addressed the AIDS issue through the women's empowerment project. As that project drew to a close, the Group, recognizing the risk of HIV infection among urban migrant and economically-disadvantaged populations, started the AIDS Awareness Project in the city of Chiangmai. In keeping with the methodologies used and the experiences acquired in the earlier projects, the WE Group was careful to include both women and men in their intervention activities, to employ participatory techniques, and to plan for project sustainability.

The AIDS Awareness Project was funded primarily by Redd Barna (Save the Children/Norway). It also received a small amount of supplemental funding from Laubach Literacy International (hereafter, Laubach), a U.S.-based non-profit organization that focuses mainly on

[1] Data for this case study were obtained through field visits and interviews with project participants, extensive interviews with Usa Duongsaa (Coordinator of the Northwest Thailand Women's Empowerment Project) and other project staff; detailed correspondence and phone interviews with staff at Laubach Literacy International including Glenn Ivers, Director of Public Information and Education, and Lynn Curtis, Director of International Programs, annual reviews of projects supported by Redd Barna in Thailand for the years 1990, 1991, and 1992; and a variety of Laubach publications including its newsletter entitled "Literacy Advocate."

promoting literacy among adults and older youths in the United States. Through its international program, Laubach provides small grants ($1,000-5,000) to partner organizations in 28 developing countries in Latin America, the Caribbean, Africa, and Asia. The purpose of the grants is to support in-country grassroots efforts to link literacy with community action for social change in a variety of areas including conservation, health, nutrition, income generation, and human rights. Since 1990 these partnerships have increasingly focused on groups that emphasize working with women.

Laubach's small grants are awarded to grassroots organizations that work directly with poor and marginalized communities. Using participatory methods, these groups target populations which demonstrate a high degree of motivation for self-improvement and ownership of community-based activities. Although Laubach's partnership grants represent anywhere from one to forty percent of their recipients' total budgets, Laubach regards this approach as a unique and particularly effective way to maximize the beneficial impact of its limited resources because it can target a wide range of highly effective programs in many different places (Lynn R. Curtis and Glenn H. Ivers, personal communications). It is with these ideas in mind, and with a view to stemming the growing HIV/AIDS epidemic in northern Thailand, that Laubach made small grants to the AIDS Awareness Project beginning in 1992.



Posters on AIDS prevention are displayed at construction worker sites.

The Need for a Focus on HIV/AIDS and Women

The need to slow the spread of HIV/AIDS is readily apparent from the statistics in Thailand. The World Health Organization estimates that about 3.5 million people are HIV infected in Asia. One of the largest increases in HIV infection has occurred in Thailand where seroprevalence rates among injecting-drug users in Bangkok increased from 1.2 percent in January 1988 to 31.2 percent in September 1988 and to 45 percent in June 1991. HIV prevalence among male patients with sexually transmitted diseases (STDs) increased from June 1990 to December 1994 in all regions of Thailand except the North. In the North, where HIV seroprevalence rates among male STD patients are already the highest of Thailand's four geographic regions, rates among male STD clinic patients have started to decline since December 1993 (U.S. Bureau of the Census 1995).

Seroprevalence among pregnant women in Thailand, which in 1990 was very low, increased to about 2 percent in 1994, with higher rates in the North--of 4-5 percent--and double that (10.6 percent) in Phayao Province. (As with STD clinic patients, from December 1994 seroprevalence started to decline among pregnant women in the North.) More than 20 percent of commercial sex workers in Thailand are infected with HIV while rates among those in northern Thailand are close to 40 percent, and in Lamphun Province as high as 62.7 percent (U.S. Bureau of the Census 1994 and 1995).

Epidemiological data show that although women constituted an estimated 42 percent of the 21 million HIV-infected adults worldwide in July 1996, the HIV gender gap is closing rapidly in Asia and Latin America. In many countries,

the proportion of infected women is now roughly equal to that of men, and heterosexual transmission continues to increase (XI International Conference on AIDS 1996).

Women are biologically more vulnerable to HIV as transmission of the virus from men to women is more efficient than vice versa. Social and behavioral research done from 1990 to the present under the Women and AIDS Research Program of the International Center for Research on Women (ICRW) showed that women in 13 countries are vulnerable to infection not only because of their own behavior but often because of the behavior of their male partners. Further, women generally know very little about sex, reproductive anatomy or physiology; their access to such information is severely limited by social norms that dictate that women should remain ignorant and passive about sexual matters, and this lack of information compromises their acceptance and knowledge of safer sex options.

Women's control over the main methods of preventing HIV infection--condom use, monogamy, and treatment and prevention of STDs--are, at best, limited (Rao Gupta and Weiss 1993). The use of condoms is controlled by men, and women generally lack the "power" both to negotiate condom use and to prevent their husbands and long-term male partners from having multiple sexual partners. Part of the explanation for women's lack of leverage is due to their economic dependence on men which prevents women from leaving relationships that they perceive to be risky (Rao Gupta 1995). Economic need also makes a small proportion of women who engage in unprotected commercial sex particularly vulnerable. As a result, women, in general, are more vulnerable to HIV *and* at a greater disadvantage in protecting themselves than men. This vulnerability of women is as true in Thailand as in other parts of the world, despite the substantial improvements that have occurred recently in Thai women's lives.

As shown in table 8, 20 years of economic growth and development have improved the quality of women's lives. In Thailand, life expectancy increased from 62 years in 1970 to 70 years in 1990, while the percentage of girls enrolled in primary school rose from 79 percent to 88 percent. In the same period, contraceptive use among women increased dramatically while fertility rates declined significantly. Based on these indicators, women in Thailand resemble their counterparts in the more developed East Asian economies rather than those in the less-developed countries of South Asia. Table 9 shows, moreover, that a larger percentage of women were economically active in 1990 in Thailand than anywhere else in the region. However, these data are somewhat misleading because they have included since 1980 unpaid family workers for whom it is not clear whether their economic situation has improved much (Siltanen, Jarman, and Blackburn 1995). Thus, it is likely that a significant proportion of Thai women are still economically dependent on others.

Table 8 Key Indicators of Women's Quality of Life

	Life Expectancy		Fertility		Percentage of (Female) Age Group Enrolled in Primary School**		Percentage of Women Aged 15-44 Using any Method of Contraception	
	1970	**1990**	**1970**	**1990**	**1970**	**1990**	**1970**	**1990**
THAILAND	62	70	5.0	2.6	79%	88%	14%*	66%
SOUTH ASIA	49	57	5.8	4.5	50%	82%	30%	39%
EAST ASIA	65	72	4.4	2.2	n.a.	n.a.	69%	81%
SOUTHEAST ASIA & OCEANIA	54	63	5.3	3.6	n.a.	113%	33%	51%

* data refer to women aged 15-49

** data refer to 1989

Source: Women's indicators and Statistics, Wistat-CD version 3, copyright (c) United Nations 1994.

Table 9 Women's Share in the Economically Active Population *

	1970	**1980**	**1990**
THAILAND	n.a.	n.a.	76.3%
EAST ASIA	41.2%	42.5%	42.6%
SOUTH ASIA	25.8%	23.9%	22.5%
SOUTHEAST ASIA & OCEANIA	37.6%	38.0%	37.0%

n.a. = not available

* Technical Note: Economic activity rates are based on working age populations of 15+ years.

Source: Women's Indicators and Statistics, Wistat-CD version 3, copyright (c) United Nations 1994.

More informative are the data on poverty. Although poverty declined overall in Thailand in the past 20 years, 14.4 million people in rural areas (34 percent) still lived below the poverty line in 1988 (Rahman 1995). Of these, women represented 62 percent, and the proportion of women in poverty increased since the 1960s (Jazairy, Alamgir, and Panuccio 1992). Even among employed women earning income, there are significant gender gaps in socioeconomic status as those engaged in agriculture earn just half the wage of men, while in non-agricultural employment women earn 71 percent of male wages. In the political sphere, as in many other countries, women are very poorly represented in positions of power (see table 10).

Antecedents to AIDS Awareness: Stemming Migration and Empowering Women

In order to address the interrelated and persistent problems of rural poverty, unemployment and underemployment, and the gender gap in socioeconomic status, the WE Group undertook an educational project in 1989 to stem the outmigration of young women from the villages of Chiangmai Province. In 1989-1990, the Group conducted exploratory research which showed that young girls were leaving rural communities because they lacked economic opportunities and realistic perceptions of urban life. Believing that opportunities were greater in urban areas, they migrated to cities in search of work, often ending up in low-paying low-skilled jobs and, sometimes, in prostitution.

The WE Group's initial attempt at addressing this problem was to design an awareness project to educate communities about the realities of urban life, hoping that accurate information about conditions in urban areas would deter young women from leaving their communities. The information campaign involved slide shows, videos, and puppet shows about life in Bangkok; booklets and brochures on labor laws and contact agencies that could provide assistance on legal protection and shelter from abuse; and community seminars. The seminars were events designed to engage and inform the entire community, and included sports and cooking competitions, information about vocational skills, raffles, and exhibitions. Some of the client-centered and participatory approaches that were later employed in the AIDS Awareness Project were used first in the Migration Project.

The Women's Empowerment Project was a logical follow-on to the Migration Project in that it was designed to complement the informational effort by actually enhancing village-based economic opportunities that would provide incentives for young people to remain in the rural areas. Project objectives were to strengthen local women's groups, to empower women, and to improve the quality of life in the community, particularly of young girls. The project was implemented from November 1990 to October 1993 in 13 villages of Chiangmai Province, some of which had been involved in the Migration Project.

The process of empowering women involved strengthening their capacity to act on their own behalf. The project's role in this was to help the women identify their own problems and design their own solutions. Project staff trained community members in problem solving methodologies and other skills, directing them to sources of information, and providing small amounts of seed money to get projects started. By limiting financial contributions, the WE

Table 10 Women's Participation in the Legislature

Female Parliamentary Representation as a Percentage of Total Representation
Upper and Lower Chambers Combined or Unicameral

	1990
THAILAND*	3.8%
EAST ASIA	16.1%
SOUTH ASIA	3.8%
SOUTHEAST ASIA & OCEANIA	5.0%

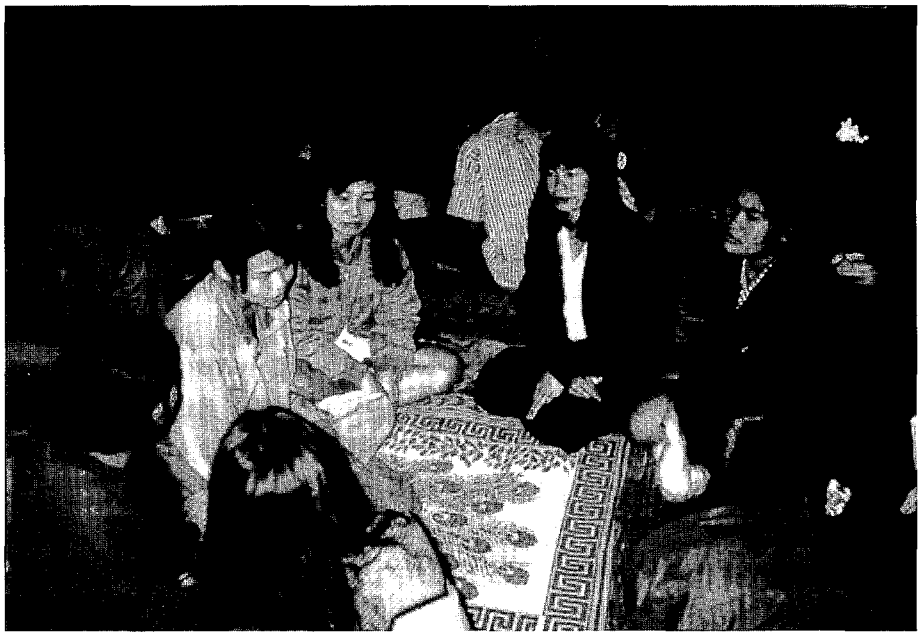
* Data refer to 1991

Source: Women's Indicators and Statistics, Wistat-CD version 3, copyright (c) United Nations 1994.

Group hoped to support the development of activities that communities could themselves sustain in the future.

Staff started the implementation process in each community by conducting a needs assessment which, because it was participatory, enabled them to get to know and establish rapport with the community. Once problems had been identified and prioritized, staff helped the women and men of the community identify sources of information such as agricultural extension and community development programs and took them on study tours to neighboring villages to learn how they had solved similar problems. They helped the community adapt these strategies to solve problems in their own villages. If the solutions required specific skills or training, project staff arranged for it. For instance, the project paid fees for women to take sewing classes, trained community members in mushroom-growing and pig-raising, and provided resources to purchase supplies and equipment to start income-generating enterprises. The project also set up a revolving fund to enable participants to start their own enterprises based on the training that had been provided. Finally, in cases where the project did not have sufficient resources to meet community needs, referrals were made to other public and private service providers.

Accomplishments of the project included the establishment of 6 revolving funds that involved 417 members. One of these funds was still functioning when the authors visited a project site in Lamphun two years after the project had ended. The fund was managed by a committee of community members, some of whom were women, and seemed to be quite successful judging from the fact that membership had been expanding. Staff reported that other revolving funds also were doing well. The project also was successful in introducing a variety of income-generating projects such as pig and mushroom production, and vegetable gardens. Staff reported that while some of these



Construction workers and their families are involved in AIDS awareness activities.

enterprises had been successful, they had not been uniformly so.

One of the more successful enterprises was a women's sewing group which had flourished as a result of project efforts--the provision of credit through the revolving funds to buy machines and raw materials and training for women who did not know how to sew. The project also provided educational information to the communities on family planning, better environmental management, and AIDS prevention. Staff reported that, as a result of these efforts, communities were strengthened, skills imparted, and women's self-confidence improved, as did their standing within their communities.

In implementing this project, the WE Group learned some important lessons that both reinforced their approach and methodology and provided new insights. They learned, for example, that in poor communities the most important priority was enhancement of incomes. People were willing to participate in other types of project activities if they felt that their livelihood issues also were being addressed. Another lesson learned was the importance of strengthening community self-reliance as a development strategy that enhanced

sustainability. The WE Group adhered strictly to a schedule for ending their involvement in a project. In the case of the Women's Empowerment Project, the Group felt three years involvement was sufficient to ensure sustainability if they had done their job right. The Group visited former project sites from time to time and provided assistance whenever needed and possible.

The AIDS Awareness Project in Chiangmai

Building on lessons learned from the Migration and Women's Empowerment Projects, and responding to the high rates of HIV infection in northern Thailand, the WE Group initiated the AIDS Awareness Project in Chiangmai city. One component of the Project, which began in April 1992, targeted construction workers while a second, begun in March 1993, targeted slum dwellers. Service delivery was coordinated by the WE Group, while funds were managed by the Faculty of Education at Chiangmai University. The Centre for Nonformal Education provided material and technical support.

The WE Group designed the AIDS Awareness Projects based on three assumptions:

- Construction workers and slum dwellers are hard-to-reach, underserved population groups at high risk of HIV infection. Effectiveness in reaching them depends (a) on bringing messages directly to them at their place of work or within their communities, and (b) on tailoring outreach efforts to fit their variable working hours and, in the case of construction workers, their frequent migration.

- While there appeared to be an adequate amount of information available to these communities about HIV/AIDS and its prevention through the radio and other means of mass communications, the information did not appear to be enough to motivate action.

- Thus, there was a need to link knowledge to action by attempting to raise individuals' awareness of their personal risk of HIV infection, and to enhance their ability to protect themselves from HIV and/or to live with it, if infected.

It was also assumed from the start that both women and men should receive HIV/AIDS information.

Project Objectives and Strategies

The objective of the AIDS Awareness Project was to reduce the rate of AIDS transmission in two hard-to-reach communities, namely, construction workers and slum dwellers. The Group set itself the goal of reaching approximately 10,000 construction workers at 50 construction sites and residents of 22 slum areas in Chiangmai city. The Group's strategy focused on reducing risk behaviors among community members, including those who were seropositive. Project staff attempted to convey positive and constructive messages that reinforced participants' ability to change their behaviors and urged them to take actions to protect themselves and their families. The messages were simple and brief, and essentially stated that:

- Everybody is at risk for contracting HIV/AIDS;

- AIDS is preventable, and you can do something to protect yourself and your family;

- This can be done by using condoms and reducing the occurrence of unprotected sex;

- Partners should talk with each other to encourage use of safe sex practices.

These messages were conveyed in a participatory manner, the idea being that because participatory processes compelled

participants to think and to analyze issues and problems for themselves, they were particularly suited to promoting AIDS awareness and inducing people to change their behaviors. Wherever possible, men, women, and children were drawn into the process. Interactive techniques, including booklets, games, and exercises, and audio-visuals were used to "break the ice" and to draw participants into a dialogue during initial interactions. Similarly, other participatory methods were used later to convey and reenforce the AIDS prevention messages. Techniques included the group mapping exercise described earlier; the use of interactive booklets which told stories about people and HIV infection; and a "chutes and ladders" game. Participants were encouraged to produce their own visual aids, including posters and story books. On a site visit in December 1994, the team observed children of all ages, including some as young as 4 years old, making greeting cards with HIV prevention messages.

Larger group activities were often accompanied by one-on-one or small group discussions for more detailed exploration of the issues. As issues related to sexual and reproductive health tend to be personal and highly sensitive topics in most societies, the small group discussions were the most appropriate way to deal with specific questions and concerns.

Project Implementation

The AIDS Awareness Project was implemented by field workers, mainly graduate students in Chiangmai University's Department of Education Extension. Candidates for these positions were chosen by the WE Group in collaboration with the department staff from among those who expressed an interest in pursuing research related to HIV/AIDS, and were paid a salary commensurate with a bachelors' degree entry-level position. Field workers received training from WE Group members and staff of the department and, sometimes, supplemental training by other organizations. At the time the research for this study was done, there were six field workers, five women and one man. Two women worked with the construction workers; the others, including the man, worked in the slums. They often helped each other out and also received assistance for specific tasks or events from volunteers in various government ministries.

To supplement their efforts and to provide continuity, field workers enlisted the support of leaders within the construction worker and slum communities whom they designated "AIDS Watch Volunteers" (AWVs). The AWVs were selected from among women and men who demonstrated "natural" leadership, were respected by their peers, and who may have had experience or training, such as in community health work, that would enhance their AIDS community work. Field workers then gave them additional training. The AWVs were made responsible for mobilizing the community for project activities, distributing and displaying AIDS newsletters, and serving as the links between their communities and project personnel. The latter role was particularly important in keeping project staff informed of community issues and needs.

The project implementation strategy was carefully tailored to meet the unique needs of

Thanks to the Women's Empowerment Project, this woman was able to get a small loan to buy some cows.

each of the two groups targeted. Because of the transitory nature of the construction workers' living and working conditions, project interventions tended to be short-term in nature--consciousness raising seminars and training of on-site peer educators who, it was hoped, would later continue to reiterate and reinforce the messages. With the more settled slum dwellers, longer-term strategies were employed. The two programs are described below.

The program for construction workers. Activities for construction workers were conducted on site at a variety of construction projects in locations throughout Chiangmai. Project staff sought approval from the construction company to hold meetings with their employees and obtained access to space at the building site. Meetings were held at various times to suit the construction workers' schedules: at lunch-hours, weekends, or at night. They were held in unfinished buildings or in the open outside the temporary on-site housing provided migrant construction workers. Staff and participants sat on the floor on mats amidst the mud, rubble, dust, and construction equipment. Staff often had to improvise to set up the portable educational materials and training equipment such as TV monitors, microphones, and posters.

Generally, several meetings were held with a group of workers at a particular construction site. Field workers often spent the first meetings, held over a week or two, building rapport with the workers and obtaining information about their activities outside work, and their attitudes, beliefs, and practices regarding their health and HIV. Following these preliminary sessions, the field workers presented information and held discussions, starting with video or slide shows on HIV/AIDS. The discussion was led by a resource person (often the field worker or a volunteer) who provided additional information and responded to questions. Other activities included AIDS-awareness games or poster drawing. The large group would then break into smaller, sex-specific groups during which field workers conducted a condom use demonstration, giving each participant the opportunity to practice the correct use of the condom.

Before field workers left a particular construction site, they selected AIDS Watch Volunteers (AWVs), introduced them to their peers, and provided each volunteer with AIDS education materials and condoms. Once field workers had moved to other sites, they continued to make periodic visits to earlier sites to check on developments, to conduct evaluations, where possible, and to provide the AWVs with copies of the monthly newsletters. If asked, they provided referrals to existing health-care services for medical advice and treatment.

The program for slum communities. In slum communities, where time was not as severe a constraint as it was in construction sites, the project worked toward strengthening the community organizations in the belief that they would learn from working together and would be capable of managing their own HIV/AIDS interventions after the project was completed. Project staff began by contacting community leaders, then moved on to the rest of the community. They took the time to visit people in their homes, to get to know community members, and to establish rapport with them. Next, they conducted a needs assessment before setting up a variety of activities designed to respond to the needs of various groups, e.g., housewives, young school girls and boys, and health volunteers. Field workers helped establish or provide access to vocational training for housewives, literacy classes for out-of-school teens and adults, and sports clubs for youth. They also conducted leadership training and planning for community leaders, and supported community development activities.

Gradually, as the community became more comfortable with project staff and the latter more knowledgeable about the needs and

concerns of the community, staff introduced AIDS awareness activities. These were designed to be age-specific and community-oriented and included the AIDS risk mapping exercise, discussion groups, community meetings, and social events to promote safe sex and use of condoms.

AWVs were selected and they helped project staff prepare and conduct meetings and other activities and distributed AIDS newsletters, condoms, and other AIDS-related materials. They also established "reading corners," using materials provided by the Centre, and posters, booklets, and other materials developed by the community members themselves. Such "corners" were located in a conspicuous place within the community, or outside the house or shop of a volunteer. These "reading corners" were an important element of the project's visibility and continuity after project staff moved on.

Once staff felt that enough momentum had been established in a particular slum community (after about a year), they introduced the project in other communities, relying on the AWVs to continue the work in the first communities. The AWVs then became responsible for providing leadership, counseling, and referral services. Field workers visited them from time to time, replenishing their supplies of informational materials and newsletters, and responding to queries that might have arisen between visits. As some of the AWVs were trained health workers themselves, they did not have much difficulty operating independently and knowing where to refer people who had questions or needed medical advice or care.

In extending the project to new slum areas, field workers followed the model developed in the Empowerment Project of getting communities to learn from each other. Thus, they took people from the "new" communities on field visits to the "older" communities. Members of the "older" communities were sometimes asked to act as "technical consultants" to the newer ones in helping them work through implementation issues.

A field worker from the University lectures amid the rubble at a construction site.

The Role of Gender

The AIDS Awareness Project involved both men and women for a variety of reasons, including the fact that both sexes were affected by the disease and mutual cooperation was needed for prevention. Thus, both men and women were included in all major activities, while there were on occasion special activities for members of a specific gender. Sometimes, the larger discussion groups broke up into smaller sex-segregated ones to provide an opportunity for those who did not feel comfortable talking about sex in a mixed group to ask questions and to participate.

The Project also employed both male and female field workers as a conscious strategy to "connect with" all members of the community. However, at the time this research was conducted, the staff was heavily weighted in favor of women. There was only one male and five female field workers. Field workers and the project director noted that the women were readily accepted by both men and women although there were occasions when the male field worker found it necessary to call upon his female colleagues to respond to issues raised in the women-only group discussions. Conversely, women participants often asked the male field worker to serve as an intermediary with male

community members, including husbands, to raise issues the women were hesitant to raise directly with the men. Having field workers of both sexes, therefore, seemed to provide the flexibility needed to meet the variety of needs and demands made by a mixed-sex group of participants.

Nonetheless, project staff found it useful to employ different strategies in working with women and men. For instance, in the slum program, field workers discovered that women were immediately more receptive to participating in the program; whereas, men had to be drawn into discussions more gradually and through the incentive provided by first appointing them as AIDS Watch Volunteers (AWVs). This approach seemed to help men acquire ownership in the project and, once this happened, they were more willing to participate in discussions about HIV/AIDS.

In another instance, field workers discovered that different communication strategies were needed to reach men and women in group discussions. Both sexes were ill at ease, initially, in talking about sexuality and HIV/AIDS. Men often needed to talk about more familiar issues like their jobs and poverty before they were willing to talk about sexual behavior and AIDS.

The WE Group's goal was to reach 10,000 construction workers at 50 sites.

Field workers reported that women were initially shy talking about the factual information, particularly when they were unsure of other participants' perspectives and concerns. Participatory exercises such as the risk assessment mapping with beans were useful in breaking the ice with women. Once women began to feel comfortable, however, staff found that they were more open and willing than men to talk and share ideas.

Project Impacts

The project's key contribution was to successfully target men and women in two hard-to-reach groups--slum dwellers and construction workers--with HIV/AIDS information. The information itself was accurate and appropriate, and appeared to engage the audiences, and to be understood. However, it was not possible to determine if the project succeeded in motivating people to change their behaviors and maintain those changes as no impact data were collected and anecdotal information was limited. Finally, although women were included in the project, it is not clear to what extent the information enabled women to protect themselves because of the limitations inherent in the prevention strategies--condom use, partner reduction, and prevention and treatment of STD--currently available.

Successes

Because of the lack of evaluation data, the comments that follow about project contributions and successes are based mainly on self-reporting by project staff and participants and the authors' observations made during visits to three slum sites and attendance at three construction worker events.

Reaching the hard-to-reach.

The project appeared to be making a valuable contribution in promoting AIDS awareness among population groups that were hard to reach. Physically, it was difficult to reach the construction workers because they were

scattered at work sites throughout the city. Also, many tended to be migrant workers. The only way to reach them was at construction sites where conditions were difficult, as described above. Because it was not always clear that there would be other opportunities to reach a particular group of workers or individuals within it, a second challenge was to convey enough motivational information in one meeting to have a meaningful impact on the construction workers' sexual behaviors. Project staff appeared to be successful in doing so. Conversely, while slum area conditions also were challenging, they were not as difficult as in the construction sites, and there was greater opportunity to meet with people more often and to make provisions for a longer term presence through which messages could be reinforced.

Anecdotal information, as well as data collected before and after "kick-off" campaigns, indicated that both men and women were increasingly aware of AIDS (its symptoms, transmission, and treatment) and of actions they could take to protect themselves. In pre/post intervention interviews at the construction sites, field workers reported that more workers were coming to the events and that some men reported that they had either stopped going to brothels altogether, or were going less frequently. Within the slum communities, field workers reported that community members sometimes took the initiative in approaching the AWVs to ask questions, get advice, and obtain condoms.

Thus, the AIDS Awareness Project represented an important complement among these particular client groups to the Thai government's media campaigns to raise AIDS awareness. The media campaigns provided much necessary information in a standard format to large numbers of persons, while the more personalized approach of the AIDS Awareness Project provided client groups with the opportunity to raise questions, discuss issues, and arrive at a more in-depth understanding of HIV/AIDS, their personal risks, and the importance of adopting risk-free behaviors. In the slum communities, too, clients had the option of consulting with the AWVs on an ongoing basis. If they needed condoms or health care, the AWVs could provide them with referrals to obtain these services at government or private clinics.

Reaching women.

Research done through ICRW's Women and AIDS Program cited above found that a variety of social, economic, and psychological factors contribute to women's vulnerability to HIV. As such, a broad range of interventions that address each of these issues is needed to reduce women's risks. They include providing women with basic education about their own bodies and sexuality, and specific information about HIV and other STDs; educating women about condom use; providing them with opportunities for individual counseling and group interactions to share personal experiences and model new behaviors; and mobilizing communities to question the norms that shape the unequal power balance in relationships. Importantly, because sociocultural norms give priority to male control in sexual interactions, reducing women's risk requires educating men and boys as well on the consequences of multiple partnerships and high-risk behavior (Rao Gupta and Weiss 1993).

Unknowingly, the AIDS Awareness Project had successfully addressed some of the issues and concerns emerging at the same time in the ICRW program. For instance, information and education were targeted to all members of the community--men, women, and children. Thus, men and boys were obtaining the information that was important for them and, through their relationships with women, for those women. Women learned about HIV and AIDS, their risks of infection, and ways to protect themselves, including condom use. By participating in the condom use exercises, they learned what a condom looked like, its texture and elasticity, and became comfortable touching it and talking about its use. Women who participated in the project also became less anxious talking about

sexual and other personal issues with project staff and with each other.

The project also had multiplier effects. For instance, field workers often created their own opportunities to inform colleagues, friends, and communities about AIDS and what they could do to protect themselves. One field worker posted AIDS information posters in her university dormitory and responded to questions from fellow students. The central offices at the university learned of her activities and asked her to develop a proposal to establish a university-wide AIDS awareness campaign, based on her work in the dormitory.

In addition, through this project, women participated in literacy and/or continuing non-formal education programs, vocational training, leadership training, community appraisal, and action planning and community development activities.

Factors Contributing to Success

Factors contributing to project success included the hard work and dedication of the staff, the use of participatory methodologies, effective networking, and a careful delineation of the project's scope of work.

A dedicated staff.

An important part of the project's success lay in the willingness of staff to work under the difficult conditions, and to be adaptive and responsive to their clients' needs and constraints. For instance, staff were willing to meet in places and at times convenient to the clients, including in parking lots and at unfinished building sites, and at nights and on weekends. This adaptability was important because it communicated to the client group that the staff cared enough about them and about the issue to make these adjustments. It also helped build trust and cooperation between project personnel and the communities. Field workers were committed to their work and appeared to have developed a good rapport with their clients. Community members stated that they missed the field workers when they did not visit and felt comfortable enough with the workers that they could ask them to visit more frequently.

Participatory methodologies.

The project's use of participatory methodologies accomplished two objectives: they generated community interest, involvement, and ownership in project activities; and they contributed to participants' internalizing the messages through their direct engagement in the educational process. Thus, all the procedures employed to determine and generate community needs and interests; the design of activities to respond to those needs; the appointment and training of AWVs; and linking "new" communities with those that had already been exposed to the AIDS messages so that they could learn from them were participatory in nature. The hands-on participatory learning techniques employed by the project, including games, posters, videos, and condom demonstrations, have already been described. The strategies appeared to be well-designed and targeted and to elicit the responses that were desired.

Good networking.

Project staff also appeared to have good networking skills and the ability to build on their connections and leverage their limited resources very effectively. The project "piggy-backed" on the services and resources available through other agencies and programs. Many of the project staff, for example, were university graduate students whose work on the project provided income and experience while giving them the opportunity to conduct research for their degrees. In turn, the staff made an important contribution to the local community. Similarly, AWVs were often appointed from among those who were already functioning as community health volunteers, and had received the appropriate training.

Definition of scope.
Another important factor contributing to project success was a clear definition of its scope which was essentially to reduce risk of HIV among the two client populations by providing information in a personalized and engaging manner. Project staff were well aware that risk reduction involved more than awareness and required, at a minimum, access to condoms. The project, therefore, did distribute condoms. The long-term strategy for enabling its client populations to continue to access condoms, health care, and counselling or other services was to provide referrals to other specialized agencies.

Finally, as in the other projects the WE Group had implemented, it adhered fairly strictly to its schedule for pulling out of a community within a pre-determined time period. The underlying principle was that if it had been successful in generating community involvement and ownership, the work would be sustained through community efforts. The project planned for the longer-term sustainability by appointing the AWVs and by making follow-up visits to the "graduated" communities.

Challenges in HIV/AIDS Prevention

Effective prevention, of course, involves more than just communicating messages effectively. It requires people to act upon the information received and to change their behaviors. In the case of HIV/AIDS prevention, it requires that men use condoms in every sexual encounter and reduce the number of sexual partners. This, in turn, requires that men have ready access to condoms, know how to use them, and do use them with all their sexual partners. While the project addressed the communications issues effectively, conducted condom use demonstrations, distributed condoms, and gave people referrals to health services, data were not available to evaluate the extent to which client groups changed their behaviors as a result of these efforts.

Among women, effective prevention is much more complex. Because current prevention methods depend exclusively or primarily on men, women have very little control, except to the extent that they can induce behavior change in men and in this, too, they have limited control as will be discussed below.

Addressing behavior change.
The AIDS Awareness Project was designed to foster awareness about HIV/AIDS risk by providing information in a personal and participatory manner, the assumption being that this would cause participants to change their behavior and adopt risk-reducing practices. An extensive literature in public health and HIV/AIDS documents that information dissemination alone is generally not sufficient to induce needed behavioral changes and, even when behaviors can be changed, to sustain them over time (Becker and Joseph 1988; Graeff, Elder, and Booth 1993; and HHRA Project 1995).

No data were available to verify whether or not the expected behavior change was occurring among the client groups. Project staff cited limited anecdotal information (letters from construction workers and other personal communications) to show that some participants claimed to have changed their sexual practices. Others reported that they were sharing the information they had received through the project with friends and co-workers. Staff also reported anecdotally that rates of infection were slowing in areas of northern Thailand where the WE Group had previously worked. Given the kind of behavior change needed to reduce HIV risks, it is reasonable to expect it to take longer than the two-year life span of the project. This would argue for a sustained effort, over a number of years, to reinforce the messages imparted by the project and provide other necessary incentives and support to sustain behavior change.

Sustainability.
Given the mobility of the construction workers, there was little project staff could do to ensure continuity and sustainability. On the other

hand, this was possible in the slum communities and project staff had planned for it, as noted above, by appointing and training the AWVs, and by making periodic follow-up visits in communities in which they had completed the introductory phase of their work. It was too early to tell whether or not the project-initiated activities could be sustained but a few points are worth noting.

As the AWVs are the only on-site agents for continuity and for reinforcing the messages over time, it is particularly important that their efforts be supported. In fact, project staff were continually exploring ways to provide extended support to the AWVs, including issuing identification cards, so that they could go to any public sector service delivery agency or to other NGOs to obtain needed equipment and services such as educational materials, condoms, and health care for their clients. It is not clear, however, that this minimal support will be sufficient to motivate the AWVs to continue to serve in their current roles.

It also is an open question how long the AWVs can maintain their enthusiasm and contribute the time needed to sustain the AIDS awareness campaign. Although they are clearly concerned and committed individuals, it is quite conceivable that their enthusiasm will diminish over time, especially if the project is no longer available for direct and immediate support. Finally, as the volunteers are not being paid, it is also possible that within these poor communities competing demands and opportunities for earning income will undermine commitments to their volunteerism. Financial incentives might be warranted to enable community volunteers to maintain their commitment.

Addressing Women's Vulnerability

As the project is currently implemented, women's empowerment with respect to HIV/AIDS is expected to occur because of three actions: (1) providing information that can be used by women and men in reducing their and their partners' risk behaviors; (2) having both partners hear the same information at the same time, so as to defuse any "power" play or uncertainty as to what each hears; and (3) using participatory methods to encourage women (and men) to become active in the learning process, with the assumption that active learning generates action.

The most important contributions the project made were to raise women's awareness, provide information and education, demonstrate condom use, and arrange fora for women to talk about their concerns among themselves and with men. Being able to initiate and promote communication on a topic like sexuality was in and of itself a major achievement for the project. This is a difficult subject in most societies and even more so in traditional societies such as Thailand. The project thus broke a significant barrier. However, it is important to note that despite the discussions and condom use demonstrations women were not motivated to seek condoms, nor were they willing to take them when they were offered.

A key to the project's success lay in presenting information in a way that took careful account of the culture and of women participants' own sensibilities. Project staff did not attempt to change women's attitudes but rather sought to be guided by them. For instance, in a project-sponsored essay contest soliciting ideas on ways to reduce risk behaviors, specifically partner reduction, the winning entry proposed that women should make themselves more sexually desirable to their husbands, thereby reducing the men's interest in going to commercial sex workers. In another case, the project incorporated knowledge about the cultural importance of children and family into prevention messages. Women were counselled to talk to their husbands and explain the risks of not using a condom, emphasizing particularly the consequences of risky behavior for the whole family and not just themselves.

Great emphasis was placed on persuasion and on-going communication between women and men. Staff stated that they "keep hoping

that by continuing to talk with both men and women, we will create and keep open channels of communication." Women were advised not to confront or push men on the issue of using condoms and taking other protective measures, the idea being to prevent conflict and dissension.

It was not clear, however, whether as a result of these efforts, men were persuaded to act differently and, therefore, truly reduced their women partners' risks. In the end, women's ability to protect themselves depended on their male partners' actual behaviors.

As with most other HIV/AIDS prevention efforts around the world and because current prevention alternatives are limited and rely primarily on male condom use and partner reduction, women are more constrained than men in protecting themselves against infection. While recognizing that there is some value in beginning where community members are in terms of relevant beliefs and attitudes, it is important to recognize that the imbalance in gender-based power relationships does constrain HIV/AIDS prevention. The problem is fairly universal--not limited to the cultural situation of Thailand--and requires long-term efforts that address this imbalance directly (Ulin 1992).

Addressing Expressed Needs

An important aspect of the WE Group's approach when it entered a community was to engage community members in assessing their needs. In the Women's Empowerment Project, the information acquired during this exercise was used to design interventions that were responsive to the communities' perceived needs, namely, for employment and income. Both population groups in the AIDS Awareness Project—slum dwellers and construction workers—also made clear that poverty was their overriding problem and access to employment and income were major concerns. However, as employment and income generation were not the main focus of the HIV/AIDS Awareness Project, these needs were addressed less comprehensively than they had been through the Women's Empowerment Project. Nevertheless, the AIDS Awareness Project responded both by direct assistance and referrals to other agencies. Types of direct assistance included vocational training, networking among various occupational groups in different communities so people could learn from each other, and provision of small loans to youth as seed money for income generation. Given the project's scope, funding levels, and staff resources, it could not undertake to address the employment and income issues more extensively.

The Role of Laubach Literacy

This case study was undertaken with a view to determining the lessons learned from a U.S.-based NGO's experiences in integrating women into field-based projects. As already mentioned, the project was designed and implemented by the WE Group and the Centre for Non-Formal Education with input from Redd Barna, the primary funder, with small amounts of funds from Laubach. Given Laubach's mode of operation, which is to support in-country groups that reflect its own principles and values, including that of giving priority to working with and benefiting women, the project may be regarded as an example of one strategy a U.S.-based agency could adopt to target women.

There are many benefits to this type of strategy. They include the cost-effectiveness of not having to incur administrative costs and the costs of higher-priced expatriate personnel; and the assurance that interventions are supported by locally-based groups which are more aware of cultural sensitivities and better placed to know and understand local needs.

For the in-country group, because Laubach provides unrestricted funding, even a small amount of support can mean much because the agency is free to use it where it is most needed, especially to respond to unexpected costs which inevitably occur during the course of a project. For example, in the case of the AIDS Awareness Project, the WE Group was able to buy and print promotional T-shirts for the volunteers. Thus,

even though the funds are relatively small (up to US$5000 per fiscal year), they were used effectively and efficiently to meet real needs.

The funding is also valuable because Laubach requires only minimal reporting. This can be important for small over-stretched organizations like the WE Group in that they do not have to devote a great deal of time to reporting but rather to project implementation. It should be noted that, because Laubach staff make periodic visits to the projects they support, there seems to be relatively little danger that funds would be misused.

On the other hand, because Laubach has so little input into the process of conceptualizing and implementing a project, it also has little control over the outcome. It must, therefore, accept the results--the successes and limitations. Also, under these circumstances, the selection process is critical, as is previous knowledge of and experience with the partner organization that is being supported. Because one of Laubach's explicit project selection criteria is to support women and women's groups, this can be an effective way to target women, although the caveat applies that the effectiveness of such a strategy depends on the partner agency's skills and experience. Nevertheless, for U.S.-based NGOs who have little experience in working with women, this may be a good way to get started.

Lessons Learned

- *Information that is presented in a personalized manner has more impact than generalized messages heard on radio and television.*

The AIDS Awareness Project yielded significant benefits to two client groups--slum-dwellers and itinerant construction workers--by providing detailed information on HIV/AIDS transmission and prevention. Because the information was given in a personalized manner that permitted discussion and dialogue, it was more meaningful to each client and, therefore, more likely to be internalized and have an impact than generalized messages on radio and TV that could be interpreted as applying to others rather than to oneself.

Much of the project's success lay in the community-centered, needs-based, and participatory approaches used, and the adaptability of project staff to take the information to sites where clients were located, and at times convenient to them. Although this was a labor-intensive and difficult process, it enabled dialogue and exchange of information between staff and client groups who might not otherwise have had an opportunity for such direct and intensive exposure to risk-prevention information and condom use training. This is important in attempting to bring about behavior changes in such a personal and difficult area as sexuality.

- *The more limited and defined the scope of the project is, the more successful it will be.*

A second factor contributing to success was the clear definition and limitation of the scope of the project to delivery of HIV/AIDS information. If other services were needed, the project arranged for referrals to other agencies better suited to delivering them.

- *Using the skills and interests of the groups and individuals involved will yield results in a cost-effective way.*

The project successfully coordinated and leveraged the interests and skills of the various groups and individuals involved--the Chiangmai Centre for Non-Formal Education for materials preparation, university students and staff for project implementation--so that they could contribute what they did best in a cost-effective way. Thus, students could serve their own interests in meeting educational requirements while contributing to project and community goals.

- *Impact on behavior cannot be ascertained without a more systematic evaluation.*

While it is clear that information and training were being delivered to the client groups, the project's impact on behavior change was not clear without a more systematic evaluation. An important element of any project of this nature must be a monitoring and evaluation component which would track short-term, mid-term, and longer term effects of the project on the outcome variable, that is, behavior change. Clients could be surveyed to report on how their behavior may have changed as a result of the information obtained through the project and other sources. Additional questions in the survey could yield valuable information about what works and what does not in the current project and how it could be modified for greater impact. Admittedly, this would be more difficult to do with the construction workers than with slum-dwellers, but data on at least one of the groups would be better than none.

In the case of projects designed to sustain behavior changes over the longer term, staff should take the additional step of examining the literature on the determinants of such change, weigh the alternative measures that would be needed to ensure the outcomes they desire, and take steps to implement them. When community volunteers play a critical role in sustainability of project-initiated activities, staff should try to evaluate the likelihood of their continued involvement and, if they believe (or have evidence) that the volunteers' involvement might decline over time, they should attempt to devise strategies that would ensure their continuity.

- *It is possible and beneficial in a culturally traditional environment to hold discussions with women about sex and sexuality and disease prevention methods if one includes both women and men in the seminars and events.*

Women benefited from these seminars and events by gaining a better understanding of their own personal risks and knowledge of prevention methods. Women's effectiveness in reducing their own risk of HIV/AIDS, however, will continue to be severely restricted until new women-controlled AIDS prevention technologies are developed and become available. In the interim, measures can be taken to strengthen women's roles in protecting themselves and exerting greater leverage over their partners. Such measures include providing women opportunities for mutual support and confidence-building fora to learn from each others' experiences what works and what does not in convincing male sexual partners to use condoms and to practice monogamy, and training in communication and negotiation skills.

- *To improve women's leverage, it is important to address women's needs for employment, income, education, and skills to enable them to reduce their dependence on male partners.*

Research shows that women's current social and economic status reduces their leverage in negotiating their partners' sexual behaviors and prevents them from leaving risky relationships. Therefore, it is important to begin to address women's needs for employment, income, education, and skills to enable them to reduce their dependence on male partners. The role of an awareness-raising project could be to facilitate such a process by providing referrals to women to enable them to improve access to such opportunities. In any case, improving women's access to such opportunities is an important development objective, in and of itself, and likely to yield significant economic and social benefits to women and to society as a whole.

Linking up with a like-minded in-country partner, such as the WE Group, can be an effective way for a U.S.-based NGO to expand its outreach to women in developing countries.

Because success depends on the performance of the partner institution, the selection process and criteria are critically important. And, if only small amounts of funds are available, it is important for the U.S. NGO to have, as does Laubach Literacy, a clear and consistent institutional policy to concentrate its support on women-focused activities.

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ICRW

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