

CMH 31-6



**GREEN FEEDING OF DAIRY COWS
FOR MILK PRODUCTION**

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GREEN FEEDING OF CROSS-BRED COWS FOR MILK PRODUCTION

The object of cross-breeding exotic breeds with indigenous cattle in India had been to upgrade the genetical potential of milk trait in ensuing generations. To exploit full milk potential of such cows, it is essential to feed them as per requirements for maintenance and production. The owner would like that his cows produce more milk, so that he earns more profit. This is possible only when he feeds them economical ration to obtain optimum milk. It is, therefore, necessary to select low cost ingredients as a substitute for grains. Good quality fodder is one way to provide cheap nutrients for milch cows. Fodders can be graded on the basis of their nutritive value and crude fibre as indicated in table I.

A system of feeding fodder in green stage, chopped to 2-3 cm in length is the best method of producing cheap milk as it provides almost all nutrients along with unidentified factors which are liable to be lost during processing or storage. Carotenoids are one of them which are prone to oxidation and get destroyed in variable quantities depending upon the processing procedures. Silage is the next best method as losses of nutrients are bare minimum. The third preference is given to hay wherein quite a number of nutrients are lost such as carotenoids, certain B vitamins, vitamin C etc.

A combination of leguminous fodder and non-leguminous fodder is considered to be the best to meet the maintenance and production requirements of a cow weighing 500 kg yielding upto 8 litres milk a day with only 1 kg concentrate ration. (Illus. I).

TABLE I
Gratation of fodders (Nutrients on Dry matter basis).

Group	Fodders	DM (%)	C.P. (%)	DCP (%)	TDN (%)	CF (%)
1.	Berseem and Lucerne	15	15.0	9.0	60	25
2.	Maize, sorghum, millet and oats	20	7.0	4.0	55	25
3.	Hybrid Napier, Teosinte, Guinea grass, Para grass etc.	25	7.0	4.0	50	25
4.	Green grass or grass hay (Thamedia, Sehima, Dicanthium and Chloris varieties etc.)	25/90	5.0	3.0	50	30
5.	Straws and stovers (wheat straw, rice straw, maize or sorghum stover etc.)	90	3.5	nil	40	40

DM Dry matter
CP Crude protein
DCP Digestible crude protein
TDN Total digestible nutrients
CF Crude fibre

Illustration I

Feeding berseem and non-leguminous fodders to a cow weighing 400 kg yielding 8 litres milk of 4.5% fat.

Ration for	Requirements			Feeds to be fed	Quantity kg	DM kg	Nutrients available	
	DM kg	DCP kg	TDN kg				DCP kg	TDN kg
Maintenance	12.5	0.25	3.10	Oat/maize/jowar green (20% DM)	38.0	7.6	0.30	4.18
Milk produc- tion	—	0.40	2.84	Berseem/lucerne (15% DM)	27.0	4.0	0.36	2.40
	—	—	—	Concentrate mixture ²	1.0	0.9	0.12	0.63
Total	12.5	0.65	5.94			12.5	0.78	7.21

- 1 DCP 0.05 kg; TDN 0.355 kg/litre of milk
2 DCP 13; TDN 70; moisture 10%

It is apparent from the data that the cow gets its nutrients more than its requirements.

A farmer producing green fodder at his farm for feeding milch animals can cut down the cost of milk production as he can feed on fresh basis approximately 38/40 kg green non leguminous fodder with 20% DM; 27 kg berseem with 15% DM and 1 kg concentrate ration. Calculating the cost structure in this case at the rate of Rs. 5/- per quintal, green fodder would be Rs. 3.25 in addition to Rs. 0.90 per kg concentrate ration. Thus the total expenditure would be Rs. 4.15 per day per cow for this class of animals. In this example the feed cost comes to 0.52 paise per litre of milk. If the market price of berseem is taken into account, the cost would increase tremendously. The market rate would vary from Rs. 7/- to Rs. 15/- per quintal. Therefore, dairy enterprise can thrive on mixed farming basis where the farmer is growing his own fodder.

When non-leguminous fodder is fed to a cow yielding 8 litre milk a day, then greater amount of concentrate ration would be required. As evident, the cow would receive 56 kg green fodder and about 1.5 kg concentrate mixture. The total cost per cow would also be Rs. 4.15 per day and cost of milk production would be again 52 paise per litre (Illus. 2).

A cow being fed hay made from non-leguminous grasses from grasslands in different parts of the country, would need rations as shown in illustration 3. If the market price is taken as Rs. 20 per quintal for hay, the total ration would cost Rs. 4.65 per cow per day to meet the requirements of this category of cows. In this case the cost of feed per litre of milk comes to 58 paise.

Illustration 2

Feeding non-leguminous fodder to a cow weighing 400 kg yielding 8 litres milk (4.5% fat)

Ration for	Requirements		Feeds to be fed	Quantity kg	DM kg	Nutrients available		
	DM kg	DCP kg				DCP kg	TDN kg	
Maintenance	12.5	0.25	3.10	Oats/Maize/Jowar green (20% DM)	56.0	11.20	0.44	6.13
Milk production		0.40	2.84	Conc. mixture ¹ (90% DM)	1.5	1.35	0.21	0.94
Total	12.5	0.65	5.94			12.55	0.65	7.07

¹ DCP 17; TDN 70; moisture 10%

Illustration 3

Feeding grass hay to a cow weighing 400 kg yielding 8 litres milk of 4.5% fat.

Ration for	Requirements			Feeds to be fed	Quantity kg	DM kg	Nutrients available	
	DM kg	DCP kg	TDN kg				DCP kg	TDN kg
Maintenance	12.5	0.25	3.10	Hay ¹	12.0	10.20	0.30	5.12
Milk production		0.40	2.84	Conc mixture ²	2.50	2.25	0.36	1.57
Total	12.5	0.65	5.94			12.45	0.66	6.69

1 15% moisture

2 DCP 16; TDN 70; moisture 10%

7

In case wheat straw is fed to cows of the same category as shown in previous illustrations the, position would be as given in illustration 4. If the average seasonal price of wheat straw in the rural areas is taken as Rs 10 per quintal the cost incurred per cow per day would be Rs.4.98. In this case the cost of feeding comes to 62 paise per litre of milk. If wheat straw is available at Rs. 20 per quintal, then feed cost of a litre of milk comes to 74 paise

It is, therefore, evident that with the increase in concentrate ration, there is a decrease in the quality of forage being fed along with a correlated increase in the cost of feeding. This trend would continue if milch cows yielding upto 20 litres of milk a day are fed leguminous and non leguminous fodders.

In high yielding cows, however, yielding more than 20 litre milk a day. TDN would always be less inspite of supplementing even 10 kg of concentrate ration.

In addition to protein and energy requirements, It is obligatory that cow feed be supplemented with mineral mixture, balanced in all major and trace elements for optimum metabolism. If green fodder is not being fed, then vitamin A supplement is also necessary. As an example, a cow yielding 15 litres milk will secrete 19.5 g calcium and 16.5 g phosphorus a day and quantity needs to be replenished from the dietary source. Such a cow would need per day 14 g calcium and 14 g phosphorus for maintenance and 33 g calcium and 24 g phosphorus for milk production as per NRC standards. Green fodders contain carotenoids 100 mg per kg as compared to 20 mg per kg in silage or 10 mg per kg in hay whereas requirement is 60 mg for production and 30 mg for pregnancy. This requirement can be met by as low as 1 kg green fodder or 4.5 kg silage or 9 kg good quality hay. If such sources are not available, then vitamin A supplement is necessary in doses of 20,000 U per day per cow (Illus. 5).

In short, the cows will yield full quantity of milk according to their genetical potential and will give optimum return, only when they are scientifically fed well balanced low cost ration for proper metabolism. (Illus. 6).

Illustration 4

Feeding wheat straw to a cow weighing 400 kg yielding 8 litres milk of 4.5% fat,

Ration for	Requirements		Feed to be fed	Quantity kg	DM kg	Nutrients available	
	DM kg	DCP kg				DCP kg	TDN kg
Maintenance	12.5	0.25	3.10	9.3	8.5	—	3.40
Milk production	—	0.40	2.84	4.5	4.0	0.64	2.80
			Wheat straw ¹ Conc. mixture ²				
Total	12.5	0.65	5.94		12.5	0.64	6.20

1. 10% moisture
2. DCP 16; TDN 70; moisture 10%

Illustration 5

Feeding Berseem and non-leguminous fodders to a cow weighing 500 kg yielding 20 litre milk (4.5% fat).

Ration for	Requirements		Feeds to be fed	Quantity kg	DM kg	Nutrients available	
	DM kg	DCP kg				DCP kg	TDN kg
Maintenance	17.5	0.25	3.10	12.5	8.5	0.34	4.67
			Oat/maize/Jowar green Berseem/lucerne				
Milk production	—	1.00	7.10	33.3	5.0	0.45	3.00
			Conc mixture ¹	4.4	4.0	0.52	2.80
Total	17.5	1.25	10.20		17.5	1.31	10.47

- 1 DCP 13; TDN 70

Illustration 6

Feeding 2/3 concentrate ration to a cow yielding 25 litres milk of 4.5% fat

Ration for	Requirements		Feeds to be fed	Quantity kg	DM kg	Nutrients available		
	DM kg	DCP kg				TDN kg		
Maintenance	17.5	0.25	3.10	Oat/maize/jowar green Berseem/lucerne	32.5	6.5	0.26	3.57
Milk production		1.25	8.87	Conc. mixture ¹	11.0	10.0	1.30	7.00
Total	17.5	1.50	11.97		17.5	1.65	11.17	

DCP 13; TDN 70; moisture 10%.

11

The performance of cross-bred cows can be expected and compared with Karan Swiss cows (Table 2) as an example for gross and net efficiency.

Table-2

Performance of individually fed cows

No. of animals in experiment.	12
Average body weight (kg),	345.17

Lactation data

Average lactation yield (kg).	3348.48
Average lactation No. of days.	292
Average milk yield/day (kg).	11.51
Average Fat%	4.3
Average FCM lactation yield (kg).	3499.16
Average FCM produced/day (kg).	12.00

Feed data

Average DM intake/day (kg).	12.50
Average DM/kg milk (kg) (including maintenance)	1.09
Average CP intake/day (kg).	1.61
Average CP/kg milk (kg).	0.14
Average DCP intake/day (kg)	1.05
Average DCP/kg milk (kg). (including maintenance).	0.09
Average TDN intake/day (kg).	7.79
Average TDN/kg milk (kg). (including maintenance).	0.68
Average TDN intake/day (kg) (excluding maintenance)	5.00
Average TDN/kg milk (kg) (excluding maintenance).	0.43

Conc : Roughage ratio.	1 : 3.20
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Feed efficiency

Average Gross efficiency.	28.83
Average Net efficiency.	44.99

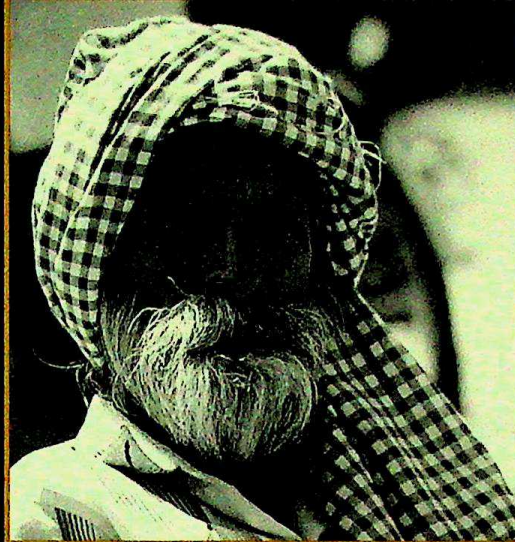
Reproductive efficiency

No. of cows came into oestrus approximately at 75 days	9
No. of cows came into oestrus approximately after 90 days.	3
No. of cows repeated.	6
No. of cows pregnant at the termination of experiment	11

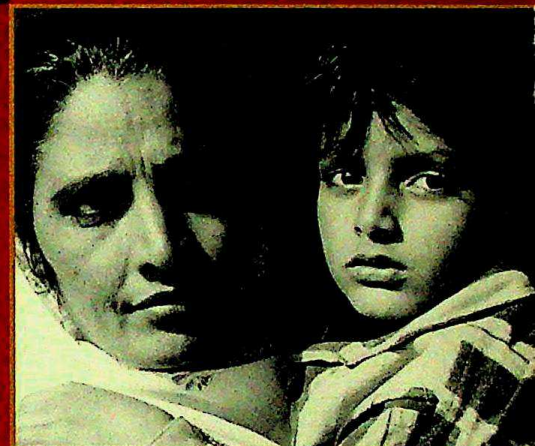
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Communities Taking Charge of Their Health



The India

Local Initiatives Program

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MANAGEMENT SCIENCES *for* HEALTH

Technical Assistance, Inc.



Contents

The India Local Initiatives Program	1
The LIP Model	2
Adapting the LIP Model to Individual Communities	3
The NGO Partners	
The Child in Need Institute	4
The Himalayan Institute Hospital Trust	6
The Centre for Research in Rural and Industrial Development	8
Bringing Hope for Better Health	10
India-LIP Successes	12
Financing India-LIP	15
Successful Elements of India-LIP	
Involving Communities	16
Improving Information about Reproductive and Child Health	18
Changing Health Behaviors	19
Building Management Capacity	19
The Future of India-LIP	20

The India Local Initiatives Program

Communities Taking Charge of Their Health



India-LIP has helped thousands of women take better care of themselves and their children.

Childbearing is risky in India, where 20 percent of the world's maternal deaths occur. Childhood, too, is risky: thousands of children die each year from diseases that could be prevented by vaccinations, adequate nutrition, and clean drinking water.

The India Local Initiatives Program (India-LIP) is transforming the face of health care in India. Based on a powerful model adapted from Bangladesh and Indonesia, India-LIP trains volunteers to provide reproductive and child health services to their communities. Already, it has benefited hundreds of thousands of poor and underserved women, men, and children.

With over one billion people, India is the second most populous nation in the world. Rich in history and culture, it is home to great religious and political diversity, large modern companies, and a burgeoning high-tech industry. But with its thriving culture, promising economy, and great diversity comes vast disparity.

Throughout India, an estimated 430 million people live in extreme poverty. They suffer from malnutrition and disease and struggle with illiteracy and inadequate housing. With limited access to preventive or curative care, the poor have little ability to improve their own health and the health of their families.

Since 1999, India-LIP has helped the poor and underserved in three regions of India gain control of their health. Management Sciences for Health (MSH) and Technical Assistance Incorporated (TAI), with support from the Bill & Melinda Gates Foundation, have worked with three Indian nongovernmental organizations (NGOs) to improve the health of the communities they serve.

This booklet tells the vibrant story of India-LIP—its beginnings, its implementation, its successes, and its prospects for continuing to help India's poor achieve better health.

The LIP Model

In Indonesia, Bangladesh, and India, the LIP has made better health a reality for millions of people living in poor and hard-to-reach communities. While each country has implemented the LIP differently, the basic model has remained the same, with two consistent elements:

- ♦ increasing access to health services
- ♦ mobilizing communities

Increasing access to health services

The LIP works within communities to increase their access to desperately needed health care. Women volunteers are trained to go from house to house in their own communities, providing information about health, making referrals, and delivering contraceptives. Through their work, the volunteers gain skills and confidence that directly improve their welfare and that of their families. The LIP also establishes health posts to provide education, limited clinical services, and medical referrals. These health posts provide readily accessible health services to communities with few other health care options.

Mobilizing communities

By mobilizing communities in support of their own health care, the LIP increases its effectiveness and sustainability. Local government and community leaders form committees to support community health volunteers. These committees build political commitment to the LIP and encourage the community to contribute to the LIP financially. In addition, the LIP establishes coalitions among governments, NGOs, private companies, and local bodies such as religious groups or social committees, to help ensure widespread commitment to program health goals.



Community involvement both increases the impact of the LIP and adds to its sustainability.



Trained volunteers bring health education and reproductive and child health services to their neighbors' doorsteps.

The Evolution of the LIP Model: From Indonesia to Bangladesh to India . . .

1970s Indonesia's community-based family planning program achieves the highest contraceptive prevalence rate among Islamic countries.

Early 1980s Bangladeshi delegations visit Indonesia to learn about the model.

1987 MSH and TAI observe and help Bangladesh adapt the Indonesian model to form the Local Initiatives Program (LIP).

1990s Contraceptive acceptance rates reach record highs in the areas of Bangladesh served by the LIP.

1999 MSH, TAI and three NGOs adapt the LIP model in India, expanding the model to include child health.

2001-2002 India-LIP demonstrates notable early successes in improving the health of the populations covered.

The NGO Partners

The Child in Need Institute

People come to Kolkata from all over eastern India in search of a better life. For many, the journey ends in the squalor of the Kolkata slums, where mere survival is a daily struggle. Families are often forced to scavenge through garbage to earn a meager living. They live in makeshift lodgings squeezed in beside canals or railroad lines, where floods, fires, and eviction are constant threats. Narrow passageways connect tiny rooms housing entire families and lacking basic amenities like clean water and waste disposal. In these communities, the incidence of preventable disease is high. Since there are few government services, including health services, basic health care is beyond the reach of most slum dwellers.

Through the LIP, the Child in Need Institute (CINI) works to improve health options for more than 200,000 residents in six of Kolkata's most squalid slums. The CINI-LIP health volunteers themselves live in the slums. Numbering over 700, they are as diverse a mix of ethnicities, religions, and castes as those they serve. Even those from the lowest caste—the “untouchables”—work side by side with volunteers from other castes. They are united by a shared commitment to improving the health of their neighbors.



Before India-LIP, many of Kolkata's poor had no access to health education or health services. Now, through CINI-LIP, they can take control of an elemental part of their lives—their health.

Using Volunteers' Talents

To educate the public about health issues and to change behavior patterns, LIP partners use communications methods such as posters, billboards, and radio spots.

CINI-LIP held focus group meetings with volunteers to identify the health information they found most difficult to communicate. Volunteers then pooled their creative talents to make communications materials, using other communications materials, pictures from magazines, or their own drawings. These images served as invaluable tools for teaching the largely nonliterate slum dwellers about health issues, such as the importance of immunizing children against diseases like polio and measles. These and similar efforts have resulted in an increase in complete immunization rates for children under two years of 84 percent in CINI slum areas.

The CINI motto “Tomorrow is too late” provides daily motivation for the LIP volunteers working to improve the conditions of those living in Kolkata's slums.



Filling a vacuum in health services

Before CINI-LIP began, there were virtually no health services in the Calcutta slums. Few doctors had offices within the slums, and most residents could not afford care or felt unwelcome at doctors' offices outside of the slums.

Now, for the first time, slum dwellers have health care choices through a three-tiered health system:

THE FIRST TIER: Community-based services.

Trained volunteers, supervised by paid community health workers, provide house-to-house health education and family planning. In addition, more than 40 new health posts offer basic reproductive and child health services.

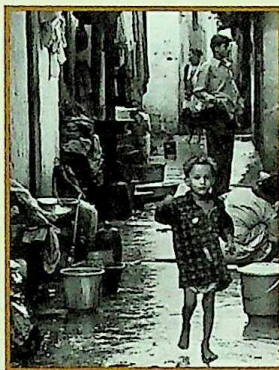
THE SECOND TIER: Referral to private providers.

For those whose needs cannot be met at the health posts, CINI-LIP established a network of private physicians outside the slums who accept referrals. CINI-LIP pays a reduced fee of 15 rupees per visit, rather than the standard 50 rupees. To help ensure affordable, high-quality care, CINI-LIP has established treatment protocols and an essential drugs list for practitioners to follow.

THE THIRD TIER: Referral to hospitals. When a case is critical or acute, health workers refer the patient to a local hospital.

Forging links with the community

CINI-LIP has forged strong links with important groups in the slums and gained the widespread loyalty of the slum communities.



For the first time, thousands of slum residents now have access to doctors' services through physicians' networks established by CINI-LIP.

By including local leaders on health committees, CINI-LIP gained their much-needed support; for example, many of these individuals donated their community clubhouses for use as health posts. These posts, which offer direct health services, education, and counseling, are now providing thousands of slum families with increased access to health care.

A Personal Success Story

When CINI health worker Debolina met slum resident Najma, the woman confided that she was concerned about her only daughter, who was depressed and threatening suicide. The health worker returned to the house a few days later only to find that Najma's daughter had carried out her threat by setting herself on fire. She had died almost immediately. Devastated, Najma believed that she had nothing left to live for. But after months of visiting and counseling, Debolina convinced Najma to become an LIP volunteer. Being a volunteer has restored a sense of purpose and meaning to Najma's life. Her friends testify that she is a changed woman, confident in her new skills and proud to be making a difference in her community.



Bringing services to hard-to-reach populations

HIHT-LIP has shown that with dedicated volunteers and staff, no population is too remote to reach with health services. In difficult terrain, volunteers often walk great distances for several hours to provide family planning, child immunizations, and safe motherhood services.

HIHT has used various methods to implement the LIP:

- ◆ Over 50 satellite and mobile clinics regularly provide remote communities with reproductive and child health services.
- ◆ Medical teams travel to remote areas to provide specialized services at health fairs. These fairs also deliver health information through puppet shows, posters, and other visual displays.
- ◆ Complicated cases are referred to the HIHT hospital. In addition, HIHT medical and nursing students provide health care in the rural communities as a requirement for graduation.

Through the work of volunteers, clinics, health fairs, and other outreach activities, HIHT has disseminated reproductive health information to over 200,000 individuals and provided health services to over 100,000 individuals in hard-to-reach areas. By educating communities and providing access to needed health services, HIHT-LIP is taking essential steps to change health behavior and improve people's health.

A Woman's Work...

Journeying along the narrow Himalayan mountain path was not easy. But everything paled in comparison with the sight of a frail, hunched woman carrying a huge load on her head. Closer observation revealed that the figure was that of a young woman around 20 years of age and in the last trimester of pregnancy. When asked why she was exerting herself in her condition, she smiled and said, "Who else is there to do this work?" This is the reality of life in the mountains—a reality belied by the snow-capped peaks, cascading waterfalls and pure air. Is it any wonder, given this state of affairs, that the health needs of women and children are usually the last priority?

—From an HIHT staff member's journal



HIHT-LIP volunteers are inspired by the words of HIHT founder Swami Rama: "Everyone cannot reach the Himalayan Institute Hospital; let the Institute reach out to everyone."

The Centre for Research in Rural and Industrial Development



CRRID-LIP has involved community members through local committees. These committees have provided invaluable support to the LIP in planning, implementing, and funding many health-related activities.

Despite many differences between the neighboring states of Himachal Pradesh and Punjab, the states share a critical need for improved health services. Ninety percent of the population in the mountainous state of Himachal Pradesh lives in scattered, hard-to-reach villages, with extremely limited access to health care. On the plains of Punjab, the need for health interventions is less obvious, but no less real. The state—known as the breadbasket of India—is one of the more prosperous in the country due to its fertile land. However, limited financial resources, manpower, and infrastructure have rendered government health services insufficient to meet the needs of the population.

The Centre for Research in Rural and Industrial Development (CRRID) has been working in these two Indian states and hundreds of villages with varied needs for more than 25 years. By building on its experience and existing resources and by engaging community members, CRRID-LIP has been able to greatly improve access to health services for underserved and poor populations.

Increasing Awareness of Existing Services

In many areas of Punjab, government health facilities exist, but people lack the information that would lead them to use the services. One mother explained, "Before the LIP, we did not know when or where to go to immunize our children, or have checkups before and after our babies were born. Now, community health volunteers come to us and give us all the information we need." The volunteers' outreach has paid off: between the beginning of the program and April 2002, the percentage of children receiving immunizations increased from 51 percent to 88 percent.



LIP volunteers have helped raise parents' awareness about childhood immunization, resulting in a dramatic increase in the percentage of children being immunized against diseases like measles and polio.

Involving communities

CRRID-LIP attributes much of its success to a high level of community involvement. In each village, the village councils, or *panchayats*, have established community health committees. The committees are composed of local leaders such as teachers, retired government and military officials, religious leaders, and elected representatives. The majority of the members are women.

The *panchayats* enthusiastically work with the volunteers and program staff to plan, implement, and monitor LIP services. They enlisted the support of religious leaders, who have offered the use of temples as health clinics and helped advocate for reproductive and child health services. Many reproductive and child health committees have also established their own cache of essential drugs with village funds.

Targeting youth with reproductive health information

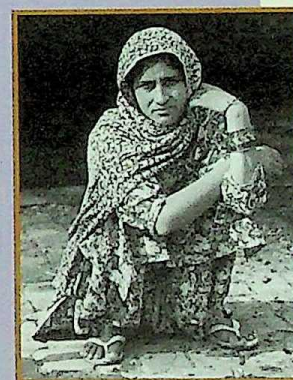
In the conservative communities served by CRRID-LIP, few parents talk to their children about sexuality. As a result, there is a great need for the most basic information: for example, CRRID-LIP staff found that the majority of girls, even after reaching puberty, did not fully understand how one becomes pregnant.

Due to parental reticence, schools are an important source of reproductive health information for adolescents. CRRID-LIP has worked within school systems to institute a family life education curriculum with a strong reproductive health component. CRRID-LIP has trained teachers in this curriculum and arranged for government doctors to substitute when teachers are uncomfortable addressing sensitive topics.

A Life-Saving Intervention

In a village in Himachal Pradesh, Neera had been having frequent and excessive menstrual bleeding for four months. Although she sought treatment from a local, traditional healer, she became progressively weaker and found it difficult to perform her household duties. The village community health volunteer was alarmed when she saw Neera's condition, and convinced her to go to a CRRID-LIP health post, where she was diagnosed with uterine fibroids and anemia.

Neera was taken to the nearest hospital and operated on immediately. Doctors told her that without this timely intervention, she would not be alive today.



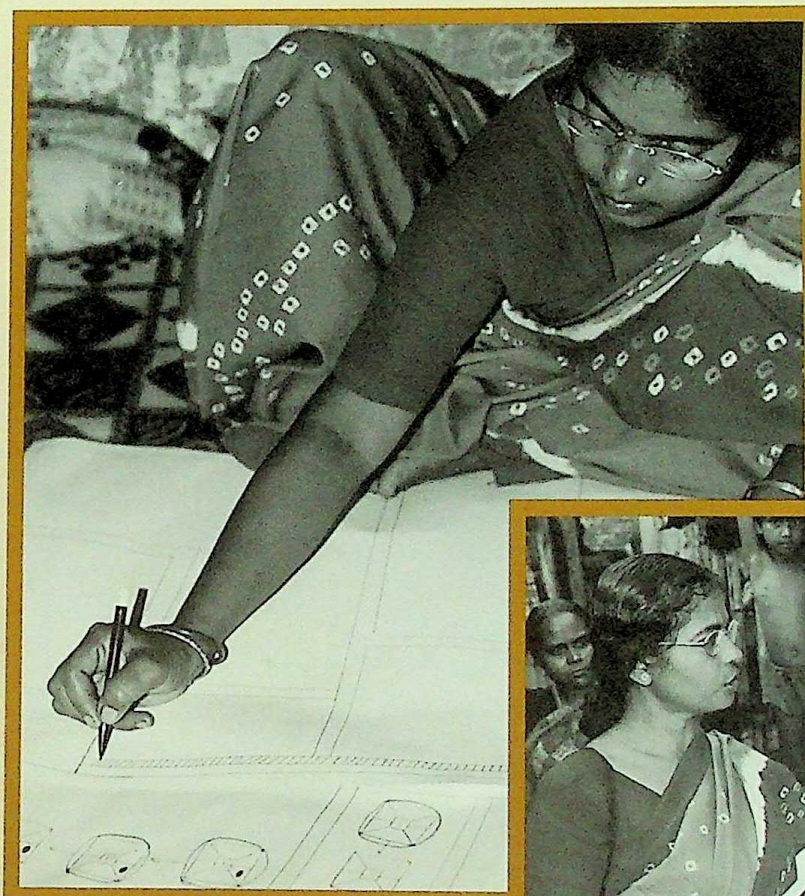
Bringing Hope for Better Health

A Day in the Life of an LIP Volunteer

Until recently, those living in many of India's poorest communities had virtually no access to desperately needed health care. Now, thanks to volunteers like Archana, things are changing.

Every day, Archana, 35, brings the possibility of better health to 50 families living in her community. This work has transformed her life. For the first time, she has the opportunity to help her neighbors and to gain public recognition for her contributions to her community.

Archana's day begins with household work, including preparing the family meal and packing her husband's lunch and sending it to him at work. She finishes this in the first half of the day. She then sets out on her rounds.

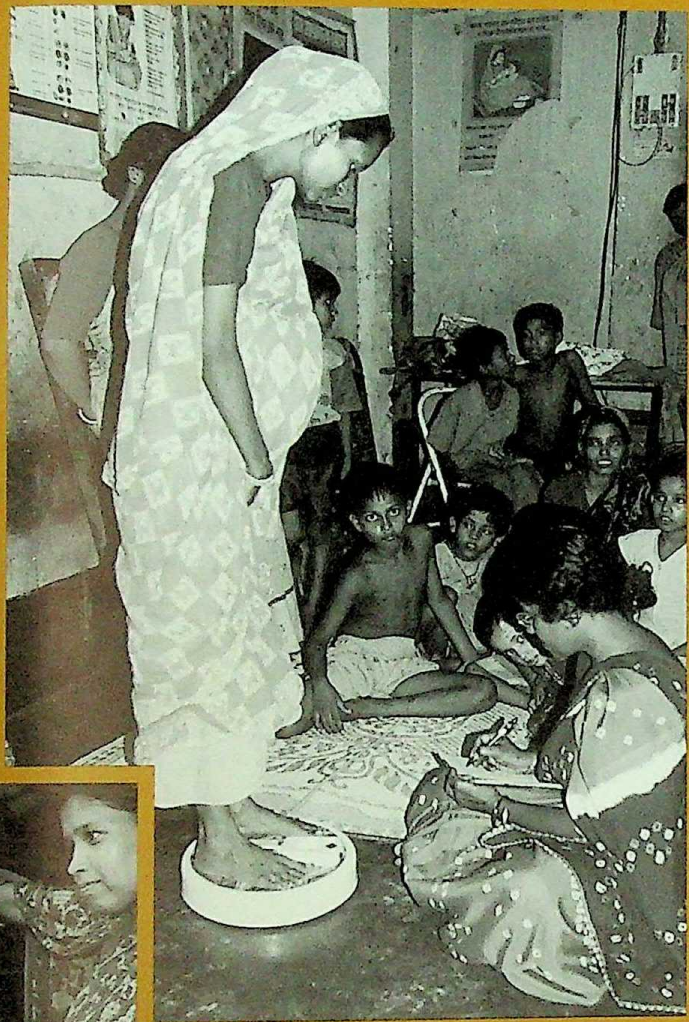


Using a map she created, Archana tracks the reproductive and child health status of the families of reproductive-age couples in her assigned area. This map helps her identify which families to approach about family planning, prenatal and postnatal care, child survival initiatives, and sexually transmitted diseases.



Archana visits neighborhood women to speak with them about family planning, safe pregnancy, and child health. Before the LIP, Archana reports, people were generally uneducated about these issues. Now, they are consciously changing their health-related behaviors.

An important first step in influencing people to change their health behaviors is developing good relationships with them and gaining their trust. Because LIP volunteers are from the community, people usually trust and listen to them.



Archana weighs pregnant women to monitor the growth of their babies. She also encourages them to breastfeed their babies and teaches them how to prepare an oral rehydration solution when the children have diarrhea.

At a meeting with pregnant women, Archana addresses the importance of nutrition in maintaining a healthy body and a healthy baby. She teaches about a balanced diet, suggests low-cost, nutritious foods, and supplies women with vitamins, iron, and calcium tablets. Archana also emphasizes the importance of visiting the doctor before and after delivery.

Thanks to Archana, many women in her community now know about and have access to contraceptives. Archana talks with women about contraceptive options and helps them to decide which methods are best for them.



Archana conducts a meeting for young people on reproductive health, using homemade health communication materials.



India-LIP Successes

Bringing Health Care to People in Need

India-LIP has brought desperately needed health education and disease prevention and treatment to communities in three areas of the country. Within the framework of the reproductive and child health strategy of the Indian government, the NGO partners have supplemented private and government resources to fill major gaps in existing health services.

Providing critical reproductive and child health services

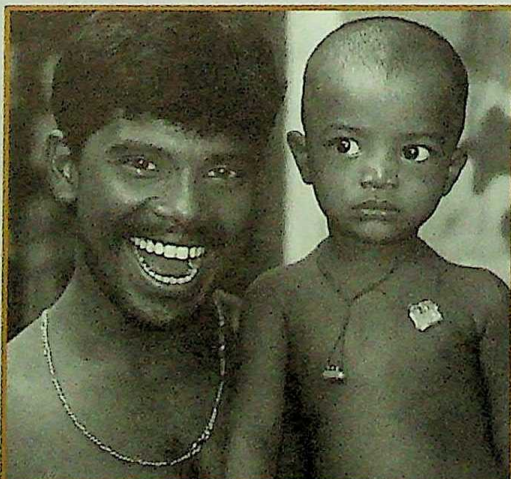
Between 1999 and 2002, the NGO partners provided family planning, prenatal and postnatal care, immunization services, and treatment for sexually transmitted diseases to more than 200,000 individuals, as shown in Table 1.

TABLE 1. Services Provided between 1999 and 2002 (in round numbers)

	CINI	HIHT	CRRID	Total
Reproductive and child health services provided (units)	102,384	104,893	168,869	376,146
Children immunized	22,449	22,322	20,252	65,023
Pregnant women receiving prenatal care	5,640	4,078	22,081	31,799
Women receiving postnatal care	4,680	2,842	9,587	17,109
Family planning acceptors	25,370	22,854	26,235	74,459
People treated for sexually transmitted diseases	3,420	6,001	3,781	13,202

Through India-LIP, over 65,000 children have been fully immunized.

India-LIP has provided health services to thousands of families, improving the health of men, women, and children alike.



Creating health posts to extend services

These striking achievements have been accomplished in different ways by the three NGO partners. Each NGO has adapted the LIP model to meet the specific needs of the poor and underserved communities it serves. In total, the partners have created almost 150 new health posts in communities where services had been absent or inadequate.

TABLE 2. India -LIP Provision of Services through Health Posts

	CINI	CRRID	HIHT
Number	41	62	51
Location	Neighborhood clubhouses	Sikh and Hindu temples and private homes	State health centers and community spaces
Staffing	Private doctors; reduced fee paid by CINI	Government doctors; reimbursed for some expenses	Medical and nursing staff and students from HIHT
Drug Procurement	Basic drugs acquired free of charge from the government	Basic drugs purchased by local committees	Bulk purchases paid for by NGOs and government

Changing health-seeking behavior

While providing needed health services, India-LIP has also focused on educating communities about healthy behaviors and the prevention of disease. The NGO partners have provided reproductive and child health information to over 728,000 adults, including 96,000 adolescents.

Since 1999, key reproductive health indicators in NGO target populations have significantly improved. As shown in Figures 1 and 2, between the baseline survey at the beginning of India-LIP and April 2002, contraceptive prevalence rates increased by as much as 74 percent in some areas, and the percentage of children under two receiving immunizations increased by as much as 78 percent.

Targeting Populations with Specific Health Interventions

The LIP NGOs have organized "health camps" to highlight important health issues in particular communities. For example, to address low childhood vaccination rates, the organizations have held camps on the importance of childhood immunization. Such initiatives have resulted in over 65,000 children being fully immunized.

All three NGOs identified a need to create awareness and provide treatment for sexually transmitted diseases (STDs). Due to the interventions of community health volunteers, health posts, and health fairs, thousands of individuals have become more aware of the symptoms of STDs, and more than 13,000 individuals have been treated.

FIGURE 1. Contraceptive Prevalence Rates

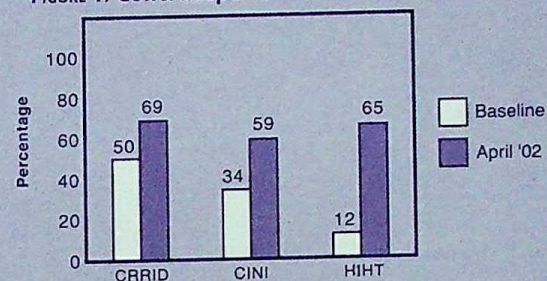
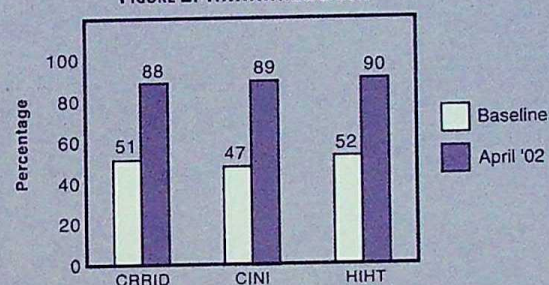


FIGURE 2. Immunizations



In three years, the NGO partners provided over 375,000 reproductive and child health services.

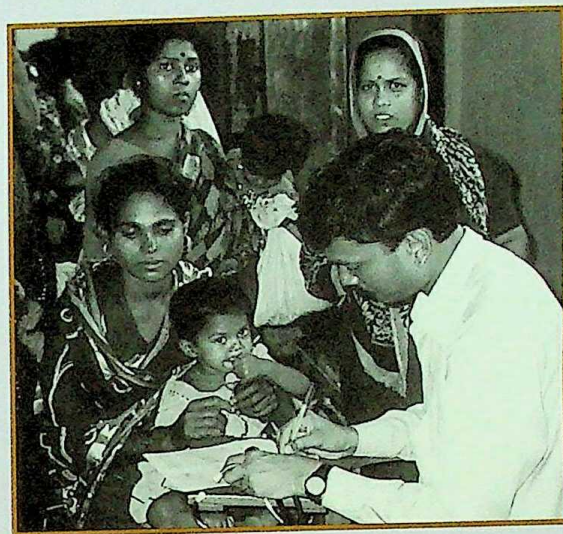
Through health fairs, India-LIP has educated the public about health issues such as STDs.



Providing Referral Services



A young woman living in a Kolkata slum, Reena suffered from excessive vaginal discharge and severe abdominal pain. With no medical options, no money, and in acute pain, she approached the local CINI-LIP health worker. The health worker referred her to a member of the LIP physicians' network, who quickly diagnosed Reena's illness as syphilis. Learning that Reena's husband had similar symptoms, the doctor treated them both and counseled them on safer sex practices.



India-LIP has drastically increased the number of women visiting doctors before and after giving birth.

Improving the health of mothers and newborns

A major focus of India-LIP has been educating women about important issues surrounding pregnancy, such as the importance of visiting a doctor before giving birth and of giving birth at a hospital or with trained health professionals at home or in a clinic. The results of the partners' efforts can be seen in the dramatic increase in percentages of women receiving prenatal care and having institutional deliveries (Figures 3 and 4).

Providing reproductive health information to adolescents

For Indian women, the average age at marriage is 16 years; 36 percent of those aged 17 to 19 are already mothers or pregnant with their first child. At the same time, the incidence of HIV and other sexually transmitted diseases is rising, exposing adolescents to increasing reproductive health risks.

India-LIP has recruited and trained hundreds of adolescent peer educators to inform their peers about reproductive health and encourage them to use available services. In total, over 96,000 adolescents have been reached with critical health information.

FIGURE 3. Prenatal Care

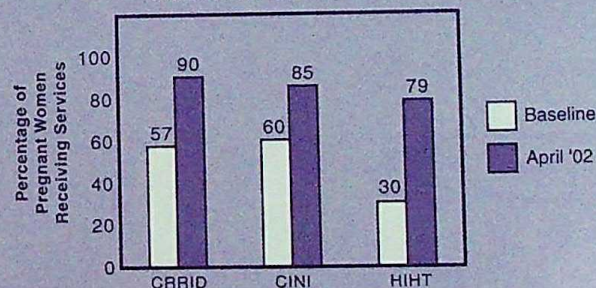
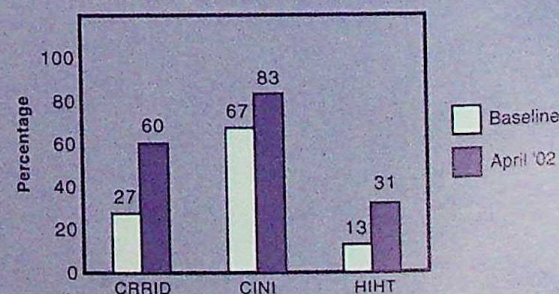


FIGURE 4. Institutional Deliveries



Financing India-LIP

In a remarkably short time, India-LIP has used cost-effective approaches to bring health services closer to people in need.

Low cost per service

From March 2000 to February 2002, the NGOs provided over 424,000 services (safe motherhood, immunizations, family planning, and limited curative care) for a population of roughly 728,000. As service volume increased, the average cost per service declined from 190 to 117 rupees, with an average cost per service of 143 rupees (US \$3.11). In the last quarter, the cost per service fell to 112 rupees (\$2.44). This figure includes all LIP implementation expenditures: mobilization, training and support of volunteers, and service provision.

High supplementary contributions

Although the Bill & Melinda Gates Foundation grant did not require supplementary funding, the partner NGOs mobilized significant in-kind and cash resources from within their own organizations, the government, and communities, by finding innovative ways to underwrite health services. Figure 5 shows that these efforts have added an estimated \$370,000, or 39 percent, to the Gates grant.

A key factor in India-LIP's low cost per service is the contribution of volunteers: almost 2,000 volunteers have reached roughly fifty families each, with marginal costs to the NGOs.

FIGURE 5. Expenditures: Anticipated and Actual
September 1999 – February 2002

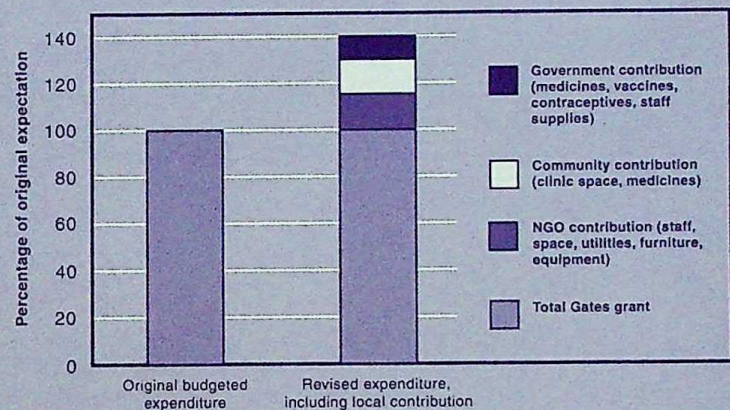
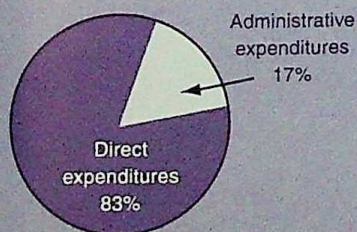


FIGURE 6.

Direct Program Expenditures as Percentage of Total Spending



Note: The American Institute of Philanthropy's *Charity Rating Guide* recommends that "60 percent or more of . . . charitable donations should go to program services. Less than 40 percent should be spent on general administration and fundraising."

Low administrative expenditures

The LIP has kept administrative expenses strikingly low, so that funds have gone where they are needed most—directly to the provision of services. As shown in Figure 6, 83 percent of the funding has been used for direct program costs.

Use of government resources

The LIP partners have cooperated with the government to use existing resources such as clinics, supplies, drugs, and staff. This has kept NGO costs low while eliminating unnecessary duplication.

Long-term implications

The cost-effectiveness of important components of India-LIP suggest that it can be easily and effectively scaled up in contiguous areas. In addition, it is anticipated that the program could be successfully replicated by NGOs in other areas of India.



LIP partners have taken advantage of existing resources, such as government health providers, rather than duplicating services. This has resulted in significant cost savings.

Successful Elements of India-LIP

How has India-LIP achieved its remarkable successes in only three years?

- ♦ involving communities
- ♦ improving information about reproductive and child health
- ♦ changing health behaviors
- ♦ building management capacity

Involving Communities

Through India-LIP, entire communities have become involved in promoting and strengthening their own health care. Much of the program's success rests on this enthusiastic outpouring of support—from the commitment of volunteers to the advocacy of committees to the financial contributions of communities at large.

TABLE 3. Number of India-LIP Community Health Volunteers and Committees

	CINI	HIHT	CRRID	Total
Number of health volunteers	745	490	535	1,770
Number of health committees	27	395	210	632

Community health volunteers

Community health volunteers form the backbone of India-LIP. After receiving training, they visit neighboring homes to provide health education, encourage people to adopt healthy practices, and offer basic health services, including providing contraceptives, vitamin supplements, folic acid, and other simple remedies.

The empowerment of community health volunteers transcends the achievement of health objectives. Through the LIP, many women have worked outside their homes for the first time in their lives, gaining unprecedented mobility, recognition, and status. In the words of a volunteer from Punjab: "Before we became community health volunteers, we were not heard in the community. Now we have a voice."



India-LIP's success is rooted in community involvement.

India-LIP has been implemented by over 600 local committees and nearly 1,800 volunteers, who have served a population of almost three-quarters of a million people. In addition to improving the health of their communities, the individuals involved have gained valuable training, experience, skills, and confidence in making sound decisions about health.

VISION STATEMENTS WRITTEN BY COMMUNITY HEALTH VOLUNTEERS

I will be greatly honored and loved in this community.

I will explore the enormous potential in these people who were always neglected.

I will bring unity to this community.

I will gather rich experience and gain confidence.

I will prove that service delivery at the grassroots level is the most effective model for improving the reproductive and child health status of these communities.

I will be able to increase awareness in the community and empower community women to take better care of themselves.

Community reproductive and child health committees

Village-based reproductive and child health committees are an integral part of the LIP model. The profile, purpose, and impact of committees vary considerably among the three NGOs:

- ◆ CINI-LIP committees are composed of influential community members and volunteers;
- ◆ HIHT-LIP committees consist of local government representatives, members of youth and women's groups, and social workers;



Local leaders have played an active role on community health committees.

- ◆ CRRID-LIP committees are staffed by local leaders, a majority of whom are women.

These vital committees have taken responsibility for a range of activities, including recruiting and training volunteers, raising money, and enlisting the support of local government, social, and religious leaders. They have received training to increase their leadership and management skills and to educate them about reproductive and child health. In

each setting, the committees have become vibrant and empowered entities that will have an impact on the health of their communities long into the future.

An Emerging Leader

An educated housewife, Karajit reluctantly became a community health volunteer. She belonged to an orthodox, upper-caste Sikh family in Punjab, and had recently married into her husband's village. She was skeptical about whether she—or CRRID-LIP—could make a difference. But as she became more involved in the health of her community, she became convinced of the importance of her role.



Today, Karajit's perspective has changed dramatically. "I feel free—I am no longer confined within the four walls of my house. My mother-in-law and my husband believe in what I am doing. People in my community acknowledge me as a leader. I am proud to have attained a level of social recognition that I have never had before."

"I am an illiterate person now providing health information and services to 50 families in my community.... I know all the people, and they ask for health advice from me. Even illiterate people can do wonders."

—Radha, a community health volunteer
in a Kolkata slum



Improving Information about Reproductive and Child Health

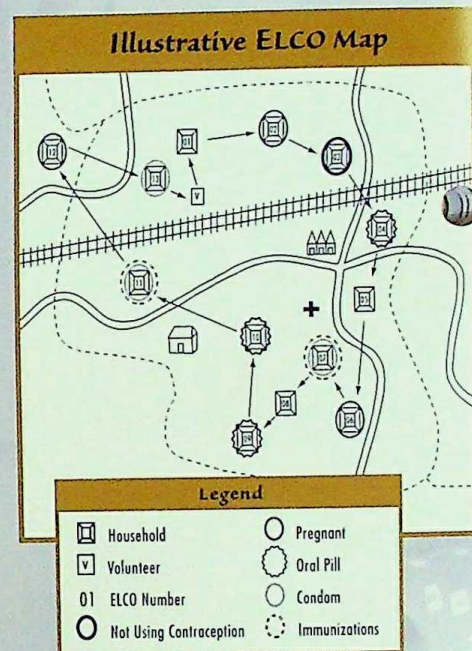
Through a village-level management information system, the India-LIP partners have been able to measure and report reproductive and child health status at the household level. This system has been an invaluable aid in helping the NGO partners to plan, monitor, evaluate and improve their performance.

Since many LIP volunteers are nonliterate, India-LIP uses ELCO (ELigible COuple) maps to track information. ELCO maps are pictorial descriptions of the reproductive and child health needs and practices of a community. They use standardized symbols to describe each household in terms of:

- ◆ family planning practices
- ◆ immunizations
- ◆ prenatal and postnatal care
- ◆ child survival initiatives

The volunteers have created their own ELCO maps and use them to plan visits, track clients' health status, motivate clients to adopt healthy practices, facilitate the use of health services, and provide follow-up.

Volunteers and their supervisors transfer data from the ELCO maps—as well as data from mobile, satellite, and fixed clinic records—to the ELCO register. These data are then compiled to yield a program overview. Program staff, volunteers, and committees have used the registers to monitor performance, share information, discuss problems, and identify needed program improvements or changes.



A wall map of a mountain village carries basic demographic and health information that community health volunteers can use to guide their work.

In 2002, an external assessment of the LIP management information system showed that:

- ◆ 90 percent of village-level community health volunteers could name at least six of the seven of the key data elements;
- ◆ information on the health status of individuals and households was correctly recorded 96 percent of the time.

Changing Health Behaviors



This wall painting shows a healthy and happy family with only two children, to encourage couples to limit their family size.

Through behavior change communication methods, the NGOs have targeted specific groups or at-risk populations with information intended to educate and motivate individuals to change their health practices. After identifying critical health intervention periods—childhood, adolescence, pregnancy, and childbirth—the NGOs have linked health education and services to these periods.

Many of these communications materials, created by the community health volunteers, have been used to supplement interpersonal counseling. They are an especially valuable tool for explaining reproductive and child health issues to nonliterate groups. Together with other LIP approaches, behavior change initiatives have had a measurable impact on health-seeking behaviors, such as the use of contraceptives by couples of reproductive age.

Building Management Capacity

In just three years, India-LIP has strengthened the ability of the NGO partners, community leaders, and community health volunteers to carry out a complex and ambitious health program. This is particularly significant given that the LIP did not just extend previous programs, but introduced completely new systems and strategies to complement and extend the government reproductive and child health program.

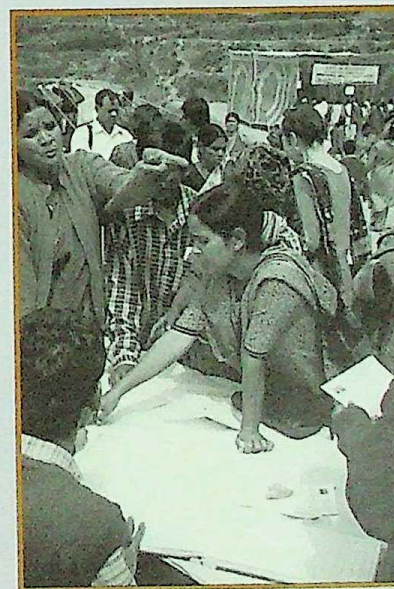
MSH and TAI provided technical assistance to the NGO partners in financial accountability, supervision, training, documentation, and management information. The effectiveness of this technical

assistance was enhanced by the strong pre-existing management capacity of the organizations. It was further aided by collaboration among the NGOs, which shared both their expertise and their experiences with one another.

At all levels of the NGOs, and throughout the communities they have worked in, individuals have assumed ownership of program processes and outcomes. The ability and willingness of volunteers, committee members, and managers to assume new responsibilities and their commitment to surpassing program goals have been essential ingredients of the program's success.

Communications materials include:

- ◆ street plays
- ◆ puppet shows
- ◆ poetry
- ◆ posters
- ◆ graffiti
- ◆ health fairs
- ◆ games and models to explain the female reproductive cycle



Management training was greatly enhanced by the initiative and commitment of volunteers.

The Future of India-LIP

The India Local Initiatives Program was designed as a pilot, to test the effectiveness of a community-based health care model in a large and diverse country. In just three years, India-LIP has taken root and flowered beyond the expectations of any of the partner organizations. Entire communities have embraced and championed the program, transforming it from an NGO-driven initiative to a community-driven one.

Already, India-LIP has produced tremendous results. Some of the results can be measured:

- ◆ significant increases in the use of contraceptives, maternal health services, and childhood vaccinations;
- ◆ substantial financial contributions from communities and local governments;
- ◆ powerful partnerships created among private, governmental, and NGO health providers.

Many of the results, however, are difficult to quantify:

- ◆ the empowerment of women who have never before had positions of influence in their communities;
- ◆ the enthusiasm and energy generated by thousands of individuals on local committees;
- ◆ the psychological impact on communities of having health care options for the first time.

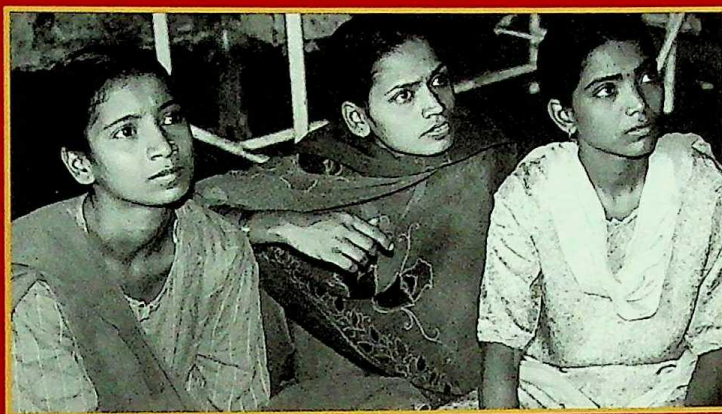
Building community commitment to and involvement in a program is the best way to ensure its sustainability. In this respect, the India-LIP partners have great hopes for the future of the LIP in India. But it is critical to maintain the momentum and fulfill the potential of the program's early successes. The hundreds of thousands of individuals who have already invested in and benefited from the LIP deserve continued support for and expansion of the program. India-LIP has shown that communities can be mobilized to guide and support health services for their own citizens. India's millions of poor and underserved, in desperate need of health care, deserve no less.



India-LIP partners are committed to maintaining the momentum of change and success that has built up during the life of the project. The health of future generations depends on such commitment.

It is quite possible that this timely and innovative grant from the Bill & Melinda Gates Foundation has seeded a quiet revolution in reproductive and child health service delivery in the second most populous country in the world.

*—from the India-LIP
mid-term review, June 2001*



MSH and TAI would like to acknowledge the enthusiasm and dedication of CINI, CRRID, and HIHT. Their commitment to the goals of India-LIP made the program's successes possible. To reach any of these organizations directly, please use the following addresses:

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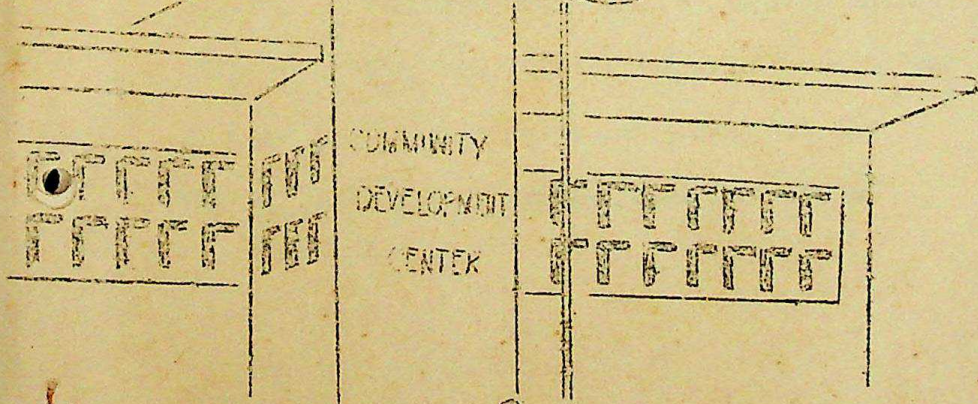
For additional information on India-LIP, please visit www.india-lip.org

COMH-31.

5



Community Development Center



U.P. COLLEGE OF AGRICULTURE

College, Laguna

THE TRAINING PROGRAM

(Its Objectives)

GENERAL:

The Training Program aims to provide government personnel with adequate knowledge and skills and to develop the proper attitude which will enable them to work effectively with rural people and bring about desirable changes in ideas, attitudes and habits which in turn will make it possible for rural people largely through their own efforts, to increase their income, improve their level of living, and utilize democratic processes as a means of achieving social goals. It also aims to develop responsible local leadership.

ITS OBJECTIVES... (Cont'd)

SPECIFIC:

- * To provide pre-service training for prospective field personnel of the Presidential Assistant on Community Development to enable them to perform efficiently their duties and responsibilities.
- * To increase the effectiveness and efficiency of supervisors, line workers, staff members, and other personnel of the PACD, through in-service training.
- * To orient policy and decision-makers of the government as well as cooperating technical support agency representatives in community development.
- * To conduct an adequate training for volunteer lay leaders and barrio council members.
- * To train in community development third country participants from Southeast Asia, the Far East and other parts of the world.
- * To evaluate progress of training activities and implement necessary improvements in methods, curricula, etc., as planned.

ASPECTS OF TRAINING

* Pre-Service Training

- o for prospective community development workers
- o for eight months

* In-Service Training

- o for personnel and field workers of the PACD
- o various durations

* Orientation Training on Community Development

- o for personnel of government technical co-operating agencies
- o for six weeks

* Orientation Training for Policy and Decision Makers of the Government

- o for members of the IDCCD; PCDC and other policy and decision makers
- o for short durations

* Lay Leadership Training

- o for Barrio Council members, civic and youth leaders and other volunteers
- o various durations

* Supervisory Training

- o for supervisors of the PACD
- o various durations

* Third Country Training

- o for participants or trainees from foreign countries
- o various durations

PRE-SERVICE TRAINING

RECRUITMENT STANDARDS

c Qualifications

- .. Must be graduates of a four-year course with 12 units of psychology, sociology, social science, economics, anthropology and political science.
- .. Must pass the national civil service examination for community development workers.
- .. Must be 21 to 45 years of age.
- .. Must be physically fit and of good moral character.

o Conditions for Training

- .. Eight months without pay.
- .. Transportation to and from the Center, board and lodging, tuition and reference materials will be furnished by PACD.
- .. May be dismissed any time during training for unsatisfactory performance or for disloyalty.
- .. Shall refund to PACD expenses incurred in case of voluntary resignation from training.
- .. Must serve the PACD at least two years after completion of training.
- .. Shall accept assignment as Barrio Development Worker in any barrio in the Philippines.
- .. Permanent appointment shall be given only after satisfactory completion of training course and six months probationary period.

PRE-SERVICE TRAINING CURRICULUM

(OUTLINE)

- o Pre-Training Orientation - - - - - 3 weeks
- o Induction Period - - - - - 2 weeks
- o Basic Training - - - - - 28 weeks

- Unit I - Principles, Concepts and Approaches in CD
- Unit II - The Philippine CD Program
- Unit III - The Role of Government in CD
- Unit IV - Group Development and Techniques of Change
- Unit V - Program Planning
- Unit VI - Evaluation
- Unit VII - Skills for Community Development
- Unit VIII - Community Training
- o Evaluation - - - - - 2 weeks

BRIEF DESCRIPTION OF COURSE CONTENT

Pre-Training Orientation (Three Weeks)

Upon notification of his selection, the trainee shall report to the Provincial Development Officer at his province of residence or station. The trainee shall then be assigned in one of the barrios of the municipality under the guidance of the barrio development worker assigned to that barrio.

The following requirements should be accomplished:

- o Barrio Report
- o Narrative Report on his Barrio Experience

BRIEF DESCRIPTION OF COURSE CONTENT... (Cont'd)

Induction (Two Weeks)

Upon reporting to the Center, the second phase of the orientation follows:

The following requirements and activities shall be undertaken:

- o Orientation and briefing on training rule facilities, role of trainees and expectations of the PACD, etc.
- o Orientation on various technical agencies cooperating in CD
- o Organization of trainees for internal government, laboratory and project activities
- o Physical acclimatization

BASIC TRAINING (28 Weeks)

* Unit I -

- .. analyses of the concepts, approaches, principles and guidelines of CD in countries having national CD programs
- .. discussion on the history and background of CD
- .. meaning and application of CD principles and guidelines

* Unit II -

- .. study of the Philippine CD Program
- .. examination of the philosophy, objectives, principles, approaches, organization and administration of the program
- .. understanding of the elements of the CD program in the Philippines

BRIEF DESCRIPTION OF COURSE CONTENT... (Cont'd)

* Unit III -

- .. study of local government as instrument of CD
- .. strengthening local governments for community development
- .. study of the barrio government, especially the Barrio Charter
- .. understanding of the functions and roles of technical agencies of the national government and private agencies engaged in CD

* Unit IV -

- .. understanding and insight of the dynamics of individual and group behavior as it relates to his role as a change agent in the community
- .. opportunity to learn and develop skills in working with individuals and groups in the barrio
- .. techniques of introducing change in relation to the objective set

* Unit V -

- .. importance of principles, theories, techniques in program planning and its relation to CD work
- .. mechanics and substance of preparation for actual work

* Unit VI -

- .. study of the importance and basic principles, techniques and processes of evaluation
- .. development of skills in conducting simple evaluation studies

BRIEF DESCRIPTION OF COURSE CONTENT... (Cont'd)

- * Unit VII -
 - .. capsule studies in certain aspects of Communication Skills, Administrative Skills, Agriculture, Home Management and Forestry
- * Unit VIII -
 - .. theory and practice of managing training activities for community action
 - .. philosophy, objectives and mechanics of the planned change approach
 - .. skills in teaching adults
- * Evaluation -
 - .. trainees given the opportunity to evaluate all aspects of training
 - .. evaluation takes place twice during the training period
 - .. general evaluation of each trainee by the staff and members of the faculty will be conducted also to determine whether the trainee could be certified for graduation
 - .. factors to be considered:
 - o academic performance
 - o general behavior during training
 - o attitude towards training
 - o relationships with co-trainees, instructors and others
- * Citizenship -
 - .. important consideration in the training program
 - .. flag ceremony
 - .. participation in citizenship activities
 - .. flag retreat
- * Physical Fitness -
 - .. every trainee shall develop physical fitness for the job
 - .. daily morning exercises and sports

BRIEF DESCRIPTION OF COURSE CONTENT... (Cont'd)

* Other Curricular Requirements -

the entire training period includes activities calculated to promote a well-rounded training for the participants, as follows:

- o organization of a barrio council
- o organization of a cooperative
- o organization of athletic groups
- o organization of project groups
- o barrio exposure
- o guidance and counselling
- o other extra-curricular activities
- o center organ
- o awards
- o personal requirements
- o physical and medical examinations
- o guarantee of nearest kin
- o contract to serve
- o clearances

BARRIO EXPOSURE

.. Intra-classes field trips for community study, barrio survey, observation of barrio council, MCDC, municipal council, PCDC and provincial boards at work and for practical skills in agriculture, program planning, evaluation and other activities.

.. Weekend stay in the barrio.- Each trainee will be made to select a barrio in the provinces of Laguna, Quezon, Batangas, Rizal and Cavite within a radius of 60 kms. from the training center. In this barrio, he locates a counterpart home and spends the Saturdays and Sundays in the barrio. He will try to field test some theories and principles he has learned in the classroom.

ORIENTATION TRAINING CURRICULUM

(COURSE OUTLINE)
(Six Weeks)

- UNIT I ... Principles, Concepts and Approaches in CD
- UNIT II ... The Philippine CD Program
- UNIT III ... The Role of Government in CD
- UNIT IV ... Group Development and Techniques
of Change
- UNIT V ... Program Planning
- UNIT VI ... Evaluation
- UNIT VII ... Skills for CD (Special skills may be
given based on preference of
participants)

o Evaluation

NATURE AND SCOPE OF ORIENTATION TRAINING

The orientation training program of the PACD is intended for policy makers and technical agency representatives at local government level. Participants are selected on the basis of their respective positions and involvement or participation in community development activities or programs. The provincial level participants are nominated by the Provincial Community Development Council. The municipal level participants are nominated by the Municipal Community Development Council, with the concurrence of the Provincial Community Development Council. Other policy makers or officials of technical departments at the national level may, upon application, participate in the orientation training.

IN-SERVICE TRAINING

From time to time, people in the service need more training on the job. This is part of their professional development. This gives rise to the need for in-service training of PACD personnel in various administrative and field levels. This is divided into the following:

- o Executive development for top administrators
- o Supervisory training for supervisors
- o In-service training for fiscal personnel
- o In-service training for clerical personnel
- o In-service training for service personnel
- o In-service training for staff and technical personnel

In PACD, it is recognized that training is a joint responsibility of both line and staff. In-service training is planned on the basis of training needs and problems felt in different levels. The identification of training needs and problems is the combined responsibility of field administrators/supervisors and division chiefs/staff. After a thorough study, these problems are discussed and training designs are evolved.

The instructors for the in-service training are drawn from various field and staff levels, based on their specialties and capacities. The instructors themselves undergo a rigid in-service training before they can teach in any in-service training.

THE TRAINING MACHINERY

The responsibility of implementing the training of the PACD rests with the Training Division. The Community Development Center is the main arm of the division in carrying out this program. The Chief of the division also acts as director of the Center. The functions of the Training Division are as follows:

- o Plans and coordinates the overall training activities of PACD.
- o Recommends policies and standard requirements for PACD training participants.
- o Conducts pre-service training for prospective CD workers.
- o Operates and manages the training center.
- o Organizes and conducts orientation classes for policy and decision makers of the government, personnel of technical agencies, and third country participants.
- o Develops training curricula and gathers training materials and teaching aids for use in all training activities of PACD.
- o Organizes and conducts, upon request, special training activities like seminars, workshops, study tours, etc.
- o Conducts in-service and supervisory training for field workers of PACD in coordination with the personnel section.

THE TRAINING MACHINERY... (Cont'd)

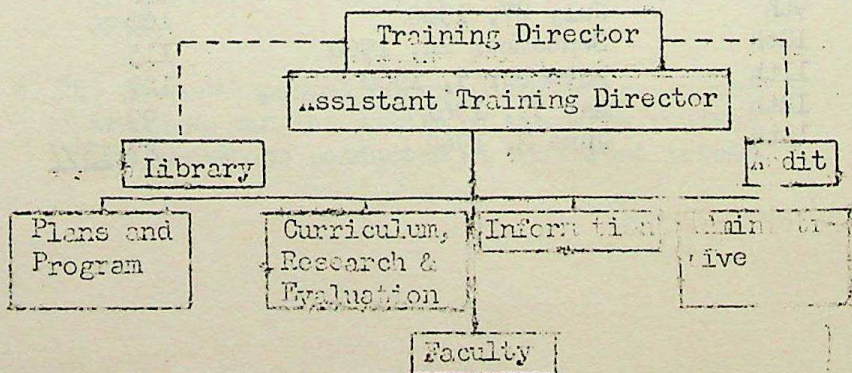
The Training Division has four staff sections to assist the training director. These are:

- o Administrative Section - in charge of internal administration.
- o Plans and Program Section - in charge of planning and programming activities of the Division.
- o Curriculum, Research and Evaluation Section - in charge of conducting evaluation and research for the enrichment of the training curricula.
- o Information Section - in charge of disseminating useful information on training and other division activities, production of training materials and media of information.

THE FACULTY

- o It is the teaching force in the Center which is responsible for the most effective rendition of the curricula and assists in the preparation of materials and study of methods and contents. In addition it is responsible for the grading, counselling, guiding and disciplining of trainees.

ORGANIZATIONAL SET-UP



CENTER TRAINING ACCOMPLISHMENTS

PRE-SERVICE SCHOOLS

<u>No.</u>	<u>Date Graduated</u>	<u>Total</u>
1st	October 16, 1956	330
2nd	July 12, 1957	176
3rd	October 16, 1957	714
4th	December 21, 1958	15
5th	March 31, 1959	23
6th	May 28, 1959	195
7th	June 13, 1959	43
8th	December 5, 1959	111
9th	March 11, 1960	30
10th	March 19, 1960	67
11th	April 30, 1960	93
12th	January 31, 1961	94
13th	June 11, 1961	321
14th	March 5, 1962	51
15th	June 16, 1962	141 <u>2404</u>

ORIENTATION SCHOOLS

1st	February 22, 1958	114
2nd	April 18, 1958	100
3rd	June 7, 1958	116
4th	August 8, 1958	115
5th	September 30, 1958	50
6th	December 15, 1959	36
7th	April 30, 1960	105
8th	June 15, 1960	173
9th	July 27, 1960	160
10th	September 24, 1960	115
11th	November 5, 1960	127
12th	May 31, 1961	99
13th	June 2, 1962	87 <u>1397</u>

HISTORY OF THE CENTER

- * With the creation of the Office of the Presidential Assistant on Community on January 6, 1956, training of field workers to undertake community development work in the barrios became necessary.
- * The first batch of pre-service trainees, composed of 342 men and women, started training on April 9, 1956.
- * The institution was then known as the Luzon Community Development Training Center. Classroom, training facilities, equipment and staff of the College of Agriculture, U.P. were availed of.
- * With the construction of the Training Center's own building, which was completed about October 8, 1957, the Center was renamed the Community Development Center. It organized its regular teaching force and provided the necessary training facilities but with the offerings of technical subject matter areas in agriculture, staff and facilities of the College of Agriculture, U.P. are also being used.
- * The original curriculum for pre-service training was the result of the combined efforts of the UPCA faculty, PACD staff, ICA (now AID) and UN advisors and Cornell-Project Professors at UPCA.
- * The present updated curriculum for pre-service training was the result of research studies and workshops conducted at different levels.

FACTS ABOUT THE CENTER

- o It is the national training center on community development...A joint undertaking between the UP College of Agriculture and the PACD
- o Located on a rolling terrain at the base of Mt. Makiling and within the UPCA campus
- o About one and a half hours ride south of Manila by bus or train
- o It has ...
 - seven standard classrooms
 - dormitories for men and women with bed capacities of 250 and 50 respectively
 - adequate office spaces
 - an audio-visual room
 - a combination mess hall and auditorium with a seating capacity of 500
 - a library
 - basketball and volleyball courts
- o With a Training Staff composed of ...
 - full-time instructors employed by PACD
 - part-time instructors from UPCA and other government institutions or agencies
 - resource persons from government or private institutions and agencies
- o Center for pre-service training, in-service training and orientation of technical support agency representatives
- o Site of seminars, workshops, conferences, etc.
- o Meeting place for foreign and local participants, trainees, observers and visitors.

FACILITIES AND SERVICES

(CAMPUS AND OFF-CAMPUS)

* Recreational Facilities

- o Within the campus of the UPCA is located the Baker Hall which is a social hall and a basketball court all in one; a swimming pool and a recreational area at the site of the 10th World Boys Scout Jamboree; and a swimming pool and an excursionists' haven at the College of Forestry.
- o Outside the campus, the following recreational activities are available:
 - ... Three billard halls—two at Grove and the other at Junction
 - ... Two bowling alleys at Junction
 - ... Three cinema houses showing American and Philippine films at Junction
 - ... Four swimming pools with bath houses at the town proper and one at Pansol, Calamba, about 2 kms. from Los Baños.

* Other Housing Facilities

- o Five hotels are located in the town proper with room rates ranging from P2.50 to P6.50 per day and serving meals at the average cost of P1.50 per meal.
- o Within and outside the UPCA campus are private lodging and boarding houses charging monthly rates ranging from P45.00 to P70.00.

FACILITIES AND SERVICES... (Cont'd)

* Other Housing Facilities:

o Rooms and/or bed spaces can be rented by those who would like to run their own mess or take their meals separately in any one of the eateries abounding the area just outside the gate of the college campus. Rooms and/or bed spaces are available at the monthly rate of from ₦10.00 to ₦30; meals may be had at the cost of from ₦0.70 to ₦1.50 per meal.

o Within the campus are three institutionalized lodging houses--the International House, the YMCA and the Girl's Dorm. Rooms for four occupants each are available at the International House with each occupant charged a rate of ₦15.00 per month and guest rooms for one or two persons at ₦6.00 per day each person. Meals are served by a private caterer within the building premises costing from ₦0.80 to ₦1.50 per meal. YMCA and Girls' Dorm rates are approximately the same.

* Church Services

o There are two Roman Catholic churches within the vicinity--one located within the UPCA campus (the St. Therese Chapel) and the other at the town proper (Parish of the Immaculate Concepcion Church).

o One Protestant church (Church Among the Palms) is located at the northern side of the UPCA campus.

o One Iglesia Ni Cristo Chapel is located at the Junction.

Facilities and Services... (Cont'd)

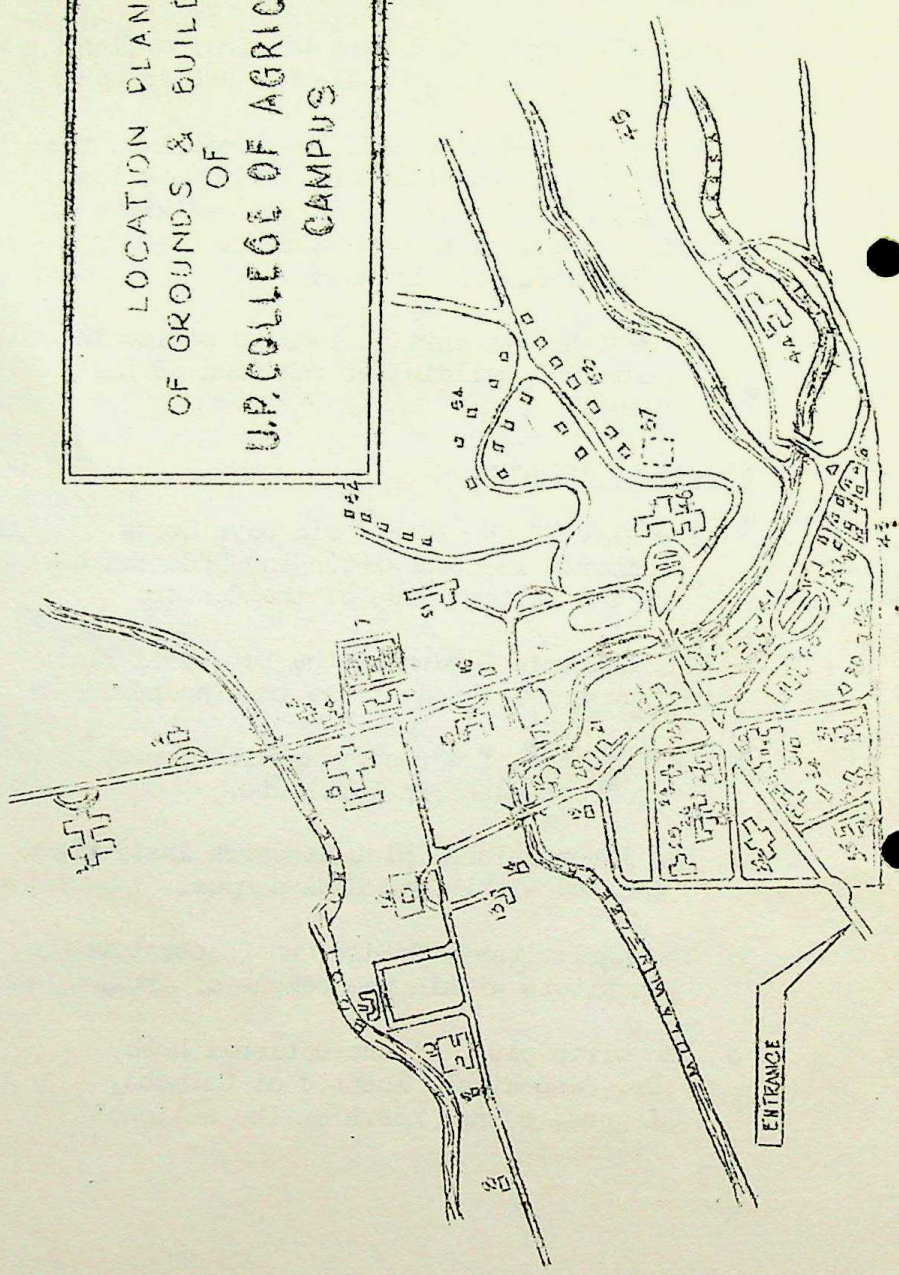
* Health Services

- o An infirmary that caters to minor medical needs is located within the UPCA campus.
- o For major medical needs, a hospital of the Philippine Constabulary--Third Station Hospital--is located on the outskirts of Los Baños, along the national highway going north of the town.
- o A rural health unit is located beside the municipal building of the town of Los Baños.

* Places of Interest

- o The site of the 10th World Boys Scout Jamboree located within the UPCA campus, on the western side of the Center.
- o The Economic Garden of the Bureau of Plant Industry located at the town proper.
- o The College of Forestry and its Forest Products Research Institute.
- o The International Rice Research Institute located within the UPCA campus.
- o The Agricultural Credit and Cooperatives Institute within the campus of UPCA.
- o The birth place of the national hero, Dr. Jose Rizal, located at Calamba, Laguna, 8 kms. north on the national highway.

LOCATION PLAN
OF
OF GROUNDS & BUILDINGS
OF
U.P. COLLEGE OF AGRICULTURE
CAMPUS

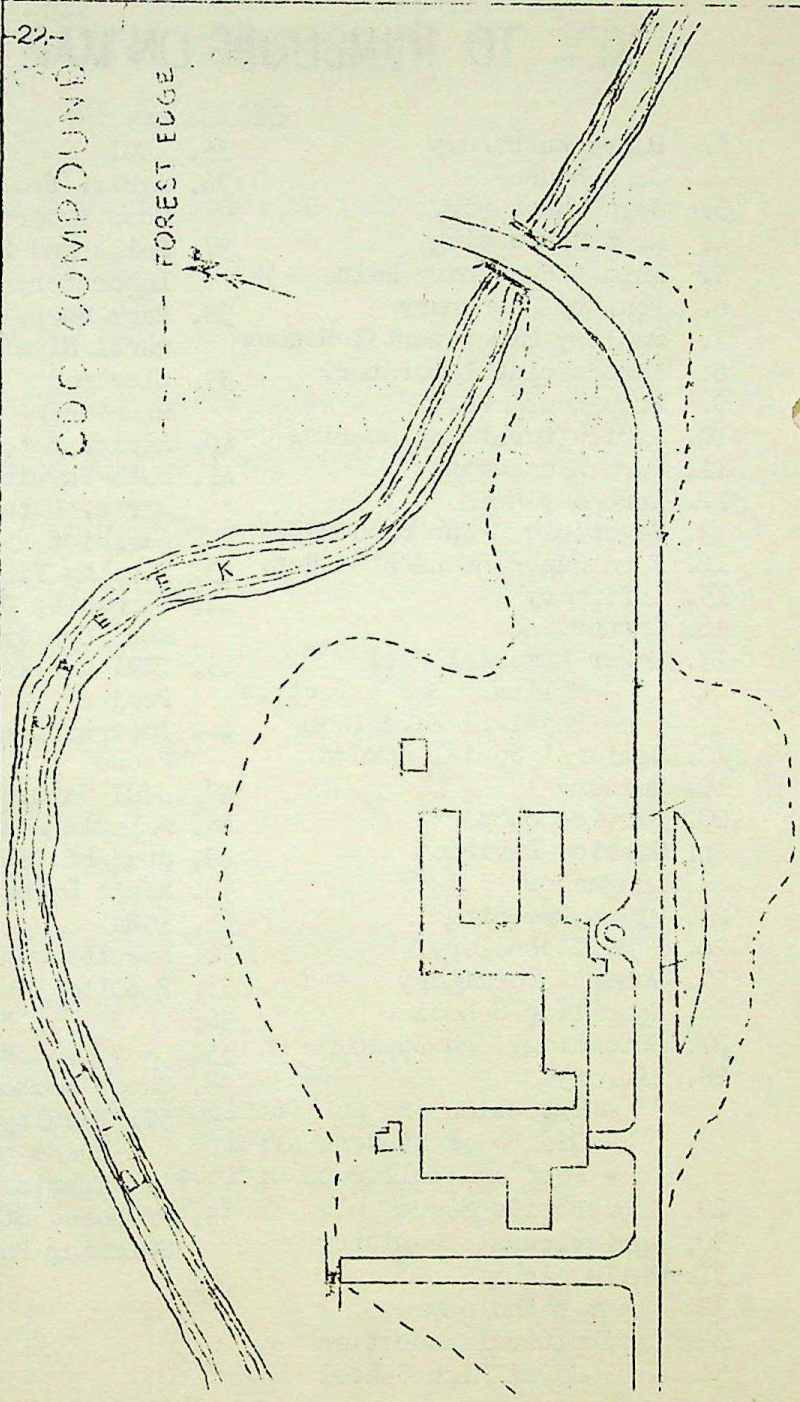


-21-
KEY TO NUMBERING ON MAP

- | | |
|---------------------------------|--|
| 1. Dairy Husbandry | 35. ACCI |
| 2. Goat House | 36. Agric. Eco. and Res. Laboratory |
| 3. Swine Husbandry | 37. Soils and Soils Laboratory |
| 4. Meat Processing | 38. Farm Shop, U.P. Rural High School |
| 5. Animal Husbandry Main | 39. Electron Microscope |
| 6. Poultry Husbandry | 40. Agric. Botany |
| 7. Poultry Experimental Houses | 41. Math-Physics and Agric. Meteorology |
| 8. Insecticide Laboratory | 42. Administration |
| 9. Pump House No. 2 | 43. Faculty Village |
| 10. Agricultural Engineering | 44. Community Development Center |
| 11. Farm Management | 45. IRRI Housing Project |
| 12. Agronomy Main | 46. International House |
| 13. Vegetable Crops Shed Houses | 47. ACCI Dormitory |
| 14. Farm Superintendent's Res. | 48. Molawin Mess Hall |
| 15. Infirmary | 49. Student Cottages |
| 16. Grandstand | 50. Men's Dormitory |
| 17. Baker Memorial Hall | 51. YMCA |
| - Military Sc. & Tactics | 52. Faculty Bungalows |
| - Physical Education | 53. Faculty Houses |
| 18. Seniors' Social Garden | 54. " " |
| 19. Nursery | 55. " " |
| 20. Service Shop | 56. Guest House |
| 21. Service Division | 57. Faculty Club House and Tennis Courts |
| 22. Languages | 58. Proposed Students' Swimming Pool |
| 23. Plant Breeding | |
| 24. Home Technology | |
| 25. Women's Dormitory | |
| 26. Maquilting School | |
| 27. Entomology and Zoology | |
| 28. Library | |
| - Extension and Publications | |
| - Office of Student Affairs | |
| - Post and Telegraph Offices | |
| 29. Cooperative Store | |
| 30. Agricultural Chemistry | |
| 31. Philsugin | |
| 32. Plant Pathology | |
| 33. Agricultural Education | |
| 34. U.P. Rural High School | |

CDC COMPOUND

FOREST EDGE



THE CO WORKER'S CREED

-23-

I believe

... in Democracy
as the suitable atmosphere
for national betterment.

I believe

... in the inherent capacity of men
to attain a richer life
through concerted efforts.

I believe

... in the ability of our people to
harness our material and human resources
toward a happier and more abundant life.

I believe

... in the coordination of welfare agencies
to bring about conditions of
social improvement

I believe

... that humility and prudence,
friendliness and devotion
are my basic attributes as a
community Worker.

I believe

... that I should seek no better reward
than to see the happiness of my people
and the progress of my country.

-24-
C D WORKER'S HYMN

ANG BAYAN'T CDO

Inang Pilipinas naririto kami
Basta tumawag ka agad magsisilbi
Itong mga anak na subok na't pili
Sa digmaan, dunong, kalusuga't puri
Lahat ng dako mo'y may kinatawan ka
Ngayon ay nais mong ikaw'y guminhawa
Sa mga CDO'y diyan ka umasa
Ikauunlad mo'y siyang isasagawa.

Halina't tayo na
Sa labas ng bayan
Mga tao roo'y dapat na tulungan
Palitawin natin ang kanilang lingid
na kayamanan
Ganyakin ang lakas ng tao't samahan
Akayin sa mga sining at sa kalusugan
Hanggang sa makamit ang adhikang bayan.

COMMUNITY DEVELOPMENT CENTER

Dedicated to the Training
of Workers
For Consecrated Service
to
People

"This Center is a Fount of the Filipino Soul, a shrine of love for all men and a mecca for the principles and ideals of Community Development. Through its portals pass the youth of the land to prepare themselves for the greater service to their country."

RAMON R. ENAMIRA
PACD

DEDICATED OCTOBER 7, 1957

(Reproduced from CDC Plaque)

Prepared by the Information Section
Community Development Center
College, Laguna
WCD/5-28-63