IADEA

Integrating Alternative Development Efforts in Asia

Report on the Workshop at Palakkad, Kerala, India
March 1-4, 1996

A Programme of
ARENA, JCNC, KSSP, PP21 RUA

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Editor: Dessa Quesada

Cover/Illustrations: Boy Dominguez
Book and Cover Design: Donato Mejia Alvarez
Photos: ARENA/PP21 RUA files

Copies can be ordered from:
JCNC
Sunrise Shinjuku Bldg. 3F
2-4-15 Okubo, Shinjuku-ku
Tokyo, JAPAN 169
Tel. (813) 5273-8160
Fax (813) 5273-8667
E-mail: jcnc@jca.or.jp

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We also apologize for our inability to publish some papers in their full version. And due to technical problems in the audio-recording of the proceedings, this report does not fully reflect the vibrant and meaningful discussions that ensued during and after each presentation.

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Preface

We are told, and we ourselves are keenly aware, that the dominant paradigm of development is unsustainable—ecologically, socially and culturally. Yet, we do not know yet exactly what is an alternative paradigm that makes the global society ecologically sustainable and socially equitable. Bridging this gap in fact is the major challenge facing us all at the close of the 20th century.

However, this does not mean that we are devoid of hope. Everywhere in the world, particularly in Asia, there are significantly large number of spirited individuals and communities, projects and programs, proving through action and achievement that there are other ways to do things. Organic farming, environmental conservation, direct consumer-producer linkages, import substitution for food crops, integrated regional socio-economic planning—all these and other efforts in the same direction which are numerous and diverse are being undertaken and developed everywhere in our region. These undertakings are not merely economic. Being made voluntarily by the motivated people, these efforts are also creating new social relationships in which the practitioners are empowered. Women are the major driving force in many of such projects. They organize, empower themselves socially, economically, and culturally, eroding and undermining the basis of mal(e) development, thus foretelling, if partially, the configuration of a gender-just culture of our future society.

It is important to note that in many cases, especially in alternative agricultural projects, traditional wisdom of Asian communities is inherited, rediscovered, refined, and successfully applied defying the instrumental rationality that destroys the basic eco-cyclic linkages of human activities with nature for the sake of immediate profits and efficiency. In these efforts are identified vibrant elements of a new civilization that we need to build before it is too late.

Yet, these models are still largely spatially dispersed, and many of the efforts still localized. To cope with the dominant systems managed by transnational corporations and transborder "free market" mechanisms, there certainly should be linkages among the diverse models so that they may gradually grow into

alternative systems that can sustain themselves and, eventually, take over the dominant system.

This is the shared understanding among us three organizations, working in far-flung areas of Asia, namely, the KSSP, ARENA and PP21 RUA/JCNC, when we agreed to work together to hold the workshop, Integrating Alternative Development Efforts in Asia (IADEA) at Palakkad, Kerala, South India. As we stated in the prospectus, this was a modest forum to bring together friends engaged in alternative efforts to "initially establish channels of communication and eventually work together cooperatively in the regional and global arena."

As the organizers we feel rewarded. The encounter between the South, Southeast and Northeast Asian practitioners was new and prsoductive. Many discovered with pleasant surprise that despite large distances, people were thinking and doing about the same things. Exchange of experience and views was exciting. In the fully rural setting of Mundur village where the Integrated Rural Technology Institute hosted the workshop, we are sure all the participants, especially those from rural villages, felt quite at home.

The IADEA was not an isolated event. It was a node of extending and crisscrossing networks. Preceeding the Kerala workshop were a vibrant workshop, Asian Women's Workshop on Alternatives in Action held during the Beijing NGO Forum on Women in September 1995, and the Negros Gathering where grassroots practitioners from East and Southeast Asia gathered and exchanged experiences on the Philippine island of Negros. There, local communities are engaged in an ambitious plan, the People's Agricultural Plan 21, which aims to create a people-based, ecological regional economy. Immediately after the Kerala workshop in early March 1996, some of the IADEA participants joined the People's Plan 21convergence that took place at Kathmandu, Nepal, drawing a large number of social movement activists and alternative development workers from all over the Asian-Pacific region. One of the major concerns of the convergence was linking the alternative system building work with resistance to the dominant "free market" and "globalization" regime. The Kerala workshop was also part of ARENA's multi-stage program for alternative socio-economic systems.

Networking for alternative systems is like playing a new type of jigsaw puzzle—new in the sense that it is a dynamic one whose total pattern is not predetermined and whose pieces, ourselves, are actors each with a free will. There are numerous clusters of pieces that are already falling into meaningfully local patterns. The Kerala workshop, as you will read in this report, was a

venture into a larger pattern connecting South Asia, East Asia, and Southeast Asia. And we know that it makes sense. Let us keep our wisdom, our hearts and muscles mobilized to complete the whole picture as sustained and ever regenerating alternative systems.

MUTO ICHIYO, *PP21 RUA*
ED TADEM, *ARENA*
M.P. PARAMESWARAN, *KSSP*

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The Idea Behind IADEA

"Well, in our country," said Alice, still panting a little, "you'd generally get to somewhere else—if you ran very fast for a long time as we've been doing." "A slow sort of country!" said the Queen. "Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that."

— from Lewis Carroll's *Through the Looking Glass*

KSSP's Integrated Rural Technology Centre at Mundur, a small village in the district Pallakad in the state of Kerala, near the southern tip of India, played host to the "Integrating Alternative Development Efforts in Asia" (IADEA) workshop in March 1996. Mundur lies just behind the gap in the mountains as one goes east from the harbour city of Kochi, which is the international gateway to this area. It was to this peninsular west coast of India that Columbus set forth in the late fifteenth century, only his faulty navigation led him westwards to another land that contains the present United States of America, the cradle of a development path that a majority of people are seeking alternatives to. Columbus might have lost his way, literally, but not Vasco de Gama, the Portuguese explorer who reached this Malabar coast of India in the 16th century to seek riches and, above all, spices that this coast continues to be famous for. Spices, one may ask, whatever for? If fast ships with better and better navigation were the technological tools for expanding colonization of America, Africa and Asia by the Europeans, the spice for long voyages was, literally, spices! Because all the food for the long voyages needed to be on the ship itself, including the all-important meat, which would tend to smell after some time. The best way to make it palatable in addition to using salt as a preservative, was to cook it with spices, which is what one finds in abundance in the state of Kerala—black pepper, cardamoms, cloves, cinnamon, etc. So if the search for spices was

one of the minor motivations for journeys that led to colonization—the Portuguese colonized the beach territory of Goa, north of Kerala—500 years later, it allowed freely the flow of capital all over Asia, under the neo-liberal globalization paradigm, that is ushering in the process of recolonization. The major difference is: the present process is accompanied by conscious attempts of resistance, both in thought and practice. What better then than that the village of Mundur should have played host to a gathering of people resisting and engaged in practising alternatives all over Asia.

There is of course added significance that the village of Kerala should have been a venue for a gathering of alternative thinkers and practitioners from Asia. The growth-oriented neo-liberal order assumed that social development shall follow economic prosperity. The majority of people all over the world are, however, becoming socially deprived and marginalized since such a causal relationship between growth and social well being is not proving necessarily true. The question therefore is: can social well-being take place in the absence of market-oriented economic growth? Kerala is a living example of the validity of such a counter claim. Economically poor, this state of India has literacy, infant mortality, sex ratio, schooling and health status that are comparable to any "advanced" nation of the world. The Kerala model of development has become a matter of serious study all over the world. Though a variety of factors in a historically complex process has contributed to such a development status of Kerala, the efforts of one of the collaborators of the IADEA workshop, namely the KSSP, have been to further and deepen this developmental ethos. About seven months after the IADEA workshop, KSSP's efforts at local area initiative (Kalliassery model) for people-centered participatory development planning has gained considerable momentum. All the 990 local self government institutions (panchayats) of Kerala are presently in the process of formulating their five-year plans which, once integrated together, will become the major focus of implementation for the government of Kerala. Looking back, one might say that the IADEA workshop was truly situated at the right place at the right time.

The motivation for initiating the project "Integrating Alternative Development Efforts in Asia" stems from the realization that critical analysis of and reaction to the dominant path of development are insufficient, and needs to be integrated with actual constructive work being undertaken in diverse forms in a variety of places, to indicate the directions to the alternative.

For the IADEA project, the word integrating, however has other connotations,

too. Conceptually, an understanding of the "alternative" demands a clearer understanding of "alternative to what", and in the case of development, that would be the dominant path of development being pursued globally. Though it is self evident that with the demise of centrally planned socialist approaches to development, the dominant form is that of aggressively pursued capitalism at global levels, it is yet important to outline the dominant somewhat more elaborately to understand the need to "integrate the alternatives."

The industrial revolution of the 18th century is generally regarded as the harbinger of the capitalist path of development. Organized industry of course dramatically changed the modes and forms of production, including the nature of control. To a large extent, therefore, the dominant is based on a particular set of economic and production relations, facilitated by deliberate choices of technologies. This techno-economic base has social consequences in the form of labor and its organization, particular working conditions, marketing networks and so on. The entire enterprise has gradually seen the evolution of goods and services that support and extend the forms and means of production, which include trade, banking, credit, insurance, transportation and similar sectors. One can similarly trace the evolution of laws and jurisprudence that acts as a strong safeguard to the economic and technological base. The choice of skills and attitudes of the workforce have gradually been molded by changes in the sphere of education in these 300 hundred years or so to make it conform to the needs of the capitalist enterprise. It must also be realized that the 18th century technological changes were situated in the newly emerging rationalist philosophy of the 17th century that has continued to provide the conceptual basis and framework to the dominant mode of thinking. What we call the dominant paradigm of development is therefore an intricately integrated enterprise of modes of production, production relations, goods and services, legal, educational and cultural structures, values and lifestyles, situated within an appropriate philosophical thought, and has evolved over a period of three centuries.

Ideally, seeking an alternative would imply an alternative to this integrated dominant. Conceptually and theoretically, we may conjure an ideal alternative, but at the level of practice, as is empirically evident, each effort touches a few aspects of the dominant, never the whole. There are perhaps thousands of groups all over Asia working in areas like agriculture, technology, small scale industries, household manufacture, trade, education, culture, legal and human rights, forms of governance and control and so on, seeking alternatives in each of these spheres,

but in a fragmented and disjointed manner. Important and vital as each of these efforts are, it must also be clear that these efforts would also need a process of integration, without which they cannot really pose a threat or challenge the dominant.

The motivation for the IADEA project has to be seen as another effort in the process for such an integration at various levels—JCNC/RUA, ARENA and KSSP are engaged in such an integrative process in their own spheres of work. The coming together of these three organizations has been an attempt to enlarge and deepen this process of integration.

However, in addition to a conceptual integration of the varied forms of practices that came together at Palakkad, an emotional integration of the practitioners was a major objective. Unlike NGO "executives" who often meet nationally and internationally, grassroots workers have little opportunity to do so. It is also considered somewhat "cumbersome" to organize their meetings, since language translations and help in paper presentations are necessary. But it is precisely such operational difficulties that keep practitioners from interaction with each other, preventing thus the creation of working and emotional alliances at the grassroots level. Recognizing the lack of such interaction, the IADEA project was specifically conceptualized to bring together practitioners from most of Asia, appropriately not to a big city hotel but to the rural environs of the Integrated Rural Technology Centre of KSSP at Mundur. Unhindered by language barriers, the manner in which the emotional bonds between the farmers of Thailand, China, Japan, Sri Lanka and India resonated could only be felt and cannot be described. Equally important, each practitioner exhibited a spontaneous urge to understand the nitty-gritty, the details of the practice of a peer from another country. For example, the assembled organic farmers got together in informal sessions to enthusiastically exchange technical details of their work, in the best possible exhibition of sharing and learning.

Some of the major presentations at the workshop, apart from providing meaningful exposure to practices in the Asian Region, underlined the need for a critical evaluation of their processes and outcomes. The Negros-Japan Alter Trade, Our Wheat Revival Movement of South Korea, Alternative Drugs of Bangladesh and India's Local Area Planning are major efforts that were shared and discussed at the workshop. Equally significant are the efforts of the China-Hong Kong groups centered around lily bulb trade but going far beyond mere trade, the Okitama Women's Network, Japan's attempts at breaking patriarchy, and of organic farm-

ers from Thailand, Sri Lanka and other countries. The convictions and the vibrancy of each practice cannot but fill the hearts with hope that so many silent and valiant efforts at alternatives to an oppressive system of production, trading, management and values will one day cease to be marginal. For that to happen, sustained attempts at alliance building, within and outside borders, must be redoubled, was a strong feeling shared by all.

The other strong feeling emerging from the workshop was that the practitioners, instead of being merely descriptive, need to be critical in evaluating and presenting their work. The dilemmas and obstacles inherent because each practice is situated in the dominant system were evident in each presentation, yet most of the presenters were reluctant to address these issues openly. A thought expressed by many was that integration would be difficult unless such critical evaluation became a culture for each practising group.

These feelings were surely not the only feelings that the workshop generated. The strongest feeling was perhaps of friendship, of oneness, of empathy that requires no mediation by activist translators. Situated in the midst of gently rolling hillocks and surrounded by higher mountains, the IRTC campus, accessible for the last five kilometers only by a narrow, broken thin ribbon otherwise called a road, has a natural idleness, calm and serenity that are so persuasive to such feelings. Add to that a discussion venue crafted out of local bamboo and thatch, right next to the kitchen with a myriad of aromas and the romance gets better. The proximity of the kitchen with never-ending coffee, tea and hot water flavored with cumin seed—a Kerala liquid to soothe the throat and digestion—and varieties of fish and vegetables provided as much food for the bellies as the discussion venue provided for thought. As one organizing participant remarked, "food security" was a major concern at the workshop.

Rural environs can have many tense and non-romantic moments, too, particularly when alternatives are sought while operating within the dominant—people have to be reimbursed for their fares! This requires recourse to money markets to exchange currency, a task that can be difficult even in the metro cities of India. Not surprisingly, much local lobbying and persuasion was required before the deed could be done, giving the foreign organizers many agonizing moments.

The local village community, totally unused to having foreigners in the area were truly bemused. The opening day's Kala Jatha—a procession followed by a song and theatre performance in the village—facilitated exposure to each other, but only whetted their appetites to know more about the "guests". As a KSSP

member puts it, people were amazed that a group of foreigners could be non-European, since the two are synonymous in their minds. That is how, perhaps, a long period of colonization under the Britishers can influence the minds. A large section of the local population, with leftist leanings, truly felt honoured to have guests from China.

Yes, it was a satisfying event...but only an event. Unless the process continues on a sustained basis, and alliance building is not merely a few event far and in between, there is danger of nostalgia setting in, and nostalgia signifies what is behind and gone, in memory only. Alternatives surely shall not emerge from nostalgia alone...

VINOD RAINA, *EKLAVYA*

IADEA Workshop Objectives

- To create a space in which practitioners of alternative development projects can interact with one another and with those in like-minded groups and organisations in Asia; and discuss their engagement with alternatives with a view to finding ways to link individual efforts into viable alternative socio-economic systems;
- To identify, sort out and conduct of concrete experiences for critical examination as well as to draw lessons from forthcoming related conferences;
- To scrutinize the South Asian cooperative experiences with specific reference to empowerment of women;
- To be a forum for activists to describe their experiences in the practice of alternative methods of action/resistance in their respective fields/sectors through dramatisation, street theatre and other forms of presentation;
- To work out plans for the exchange of skills and sharing of experiences among alternative development practitioners of South Asia and Southeast/East Asia;
- To facilitate those engaged in alternative projects to exhibit, share and examine their projects in practical and theoretical terms.

PARTICIPANTS

IADEA brought together practitioners from 12 countries and areas involved in actual implementation of alternative socio-economic development projects, individuals and groups that render support services for ground level initiatives as well as those concerned with establishing linkages between micro experiences and macro concepts and perspectives.

WORKSHOP DATES: March 1-4, 1996

SETTING: *THE HILLS OF PALAKKAD*

Palakkad is steeped in all the myths associated with Kerala, a populous South Indian province. Kerala's mythical origins ascribe to *Parasuram* the act of recovering a stretch of land south of *Gokarna* from the Indian Ocean. Myth persists in this land of numerous incredible art forms, be it in folk idiom as in the case of the fantastic Theyyam, or dance, or in stylised form as in the *Kathakali* dance dramas. These formed the rich cultural context for the IADEA workshop which had the Palakkad countryside and embracing hills as its setting.

Schedule

Day One Friday, March 1

Arrival/Registration
Procession through Mundur
Opening ceremony, Cultural evening
Brief announcements on exposure trips, house rules

Day Two Saturday, March 2

Morning
Session One: Plenary
i. Introduction, Rationale for the Workshop (Ed Tadem, M.P. Parameswaran, Vinod Raina, Muto Ichiyo)
ii.. Philippines: Negros Alternative
iii. Korea: Our Wheat Revival Movement

Session Two: Parallel sessions:
Parallel session One—
i. Organic Farming in Thailand
ii. Indonesia: The Failure of Peasantry Commodity in Market Economy Mechanism
Parallel session Two—
iii. Organic farming in Sri Lanka
iv. Malaysia Farm extension programme
v. Nepal: Social Forestry
Afternoon
Session Three: Plenary
Sharing of reports from Parallel sessions

Session Four
Group discussion

Day three Sunday, March 3

Morning
Session One: Plenary
i. Japanese rural women: Okitama Women's Network/ Shirataka Food Processing Farmer's Collective.
ii. Panel discussion on Organic Farming (Panelists: Zaffrullah Chowdhury, Chung Sung Heon, Ms. Megumi Kawasaki, Mr. G.K Upawansa).
iii. Women's cooperative Credit Union in China
iv. Alternative Trade Japan
v. Gonoshasthaya Pharmaceutical Bangladesh
Session Two
Group discussions

Afternoon
Session Three
Exposure Trip in two groups:
Group One visits the Micro Hydel generation site in Kerala—an initiative of IRTC.
Group Two looks at the Alternative Housing Programme and Improved Woodburning Cookstoves.

Day Four: Monday, March 4

Morning
Session One: Plenary
Presentation of Group reports,
Open Forum on exposure trips
KSSP's presentation: People's Planning on Grassroots Level
Session Two: Plenary
Linking the Micro to the Macro, Questions and Challenges for future (Vinod Raina and Lau Kin Chi)

Afternoon

Session Three

Small group discussion on Questions and Challenges for Future

Session Four: Plenary

Presentation of Group Reports, Synthesis, Future Planning

WORKSHOP PAPERS

Clockwise from top left: Sri Lankan Anita Fernando; Dr. Zafrullah Chowdhury of Bangladesh speaks; Jung Ok Lee and Sung Heon Chung of South Korea, HK-China delegation shares their women's cooperative credit union program; Dr. Gopi Upreti of Nepal; Yuko Niino of Okitama Women's Network in Japan; and GK Upawansa of Sri Lanka.

PAP21 - The Negros Alternative

NEGROS: *Land and people*

Negros island is the fourth largest island of the Philippines. Politically, the island is subdivided into two provinces. Negros Occidental belongs to region 6, the Western Visayas, while Negros Oriental belongs to region 7, the Central Visayas. The island's total land area is 13.328 sq. km.

The island is subdivided from north to south by a mountain range topped by Mt. Kanlaon, which is 2,465 meters high. Most of the land, however, is gently sloping from the coast to the mountains. About 67% of land are below 18% of slope and classified as alienable and disposable.

For centuries, Negros has been a sugar monocrop economy. During the 1960-1970 sugar boom a total of 390,000 hectares were cultivated with sugarcane. This figure comprises some 75% of all arable land planted to sugarcane. Here, one may observe sugarcane fields that stretch as far as the eye can see, far into the hinterlands, up to the areas that are in fact too marginal for cane cultivation.

Other agricultural crops are far less important: 61,000 hectares are devoted to rice and 81,000 hectares for corn growing. Recent data show that the whole island has only about 5% forest cover left.

Negros has a total population of 2.5 million, which is relatively young with 46% below 15 years of age, 51% between 15 and 64 and 3 % 65 years and over. About 87% are Catholics.

In terms of urban-rural division, 54% live in the rural areas and 46% in the urban centers. Provincial figures pegged the poverty incidence at 67%.

The island is generally a sugar-producing area since the early 1800s, making a permanent mark on all sectors of the populace, they being affected by the rise and fall of the industry in one way or another. Since the 1800s, the sugar industry has undergone different stages of development, each having a peculiar impact on sugar production and a common effect of driving the poor deeper into poverty.

Eighteen sugar centrals operated in the whole island of Negros during the boom years. The price of sugar then was good when trading was in the hands of a very powerful elite and thus the accumulation of wealth was beginning to make its impact on the larger segment of the population.

In 1934, trade agreements between the governments of the Philippines and the United States tied the province to a triple state of dependency on a single market and dependence on imported goods which included even staple food. Consequently, the Negros population became totally dependent on the sugar industry and trade.

Then the inevitable came: the sugar crisis of 1983, when the United States drastically reduced its sugar importation and world market prices of sugar plummeted. The province once again became a harvest field for the scythes of Death. During those years, 60 per cent of all rich sugar lands were idle while the children of the farm workers died of starvation. Two big mills (out of 18 sugar centrals operating in the island) shut down, while almost half of the other existing mills in the province operated way below their capacities, thus adding to the mass of the impoverished, the industrial workers sector. Estimates put the figure of the displaced workers then at 250,000.

Even the sugar lords were forced to abandon their farms and temporarily stopped sugar production, leaving behind the workers to fend for themselves with no resources at their disposal. This prompted the once meek and obedient *sacadas* (sugarcane field workers) to move radically in order to survive. They were forced by circumstances to take over the abandoned farms and seeing their small success, gradually cultivated more of the hacienda's land using small basic tools for the cultivation of food crops.

This was viewed by the government and the landed elite as a very radical step, a result of the propaganda offensive of the revolutionary movement, which was then gaining momentum throughout the island. However, it was

also a concrete example of socio-economic initiatives at the grassroots level. By 1988, the displaced workers had already occupied and controlled some 49,000 hectares of land but not without sacrifices. Several POs and NGOs leaders were killed—victims of repression.

This is the general backdrop of the forging of the people-to-people relationship between JCNC together with the concerned sectors in Japan and the impoverished people of Negros.

Beginnings of partnership between JCNC and Negros

It all started with emergency relief assistance for the starving families, especially the sugarcane workers and peasants in Negros brought about by the sugar crisis of 1983.

The Japan Committee for Negros Campaign was launched to raise funds and other support intended for the emergency needs of a starving people. But that was not all there was to it. In so doing, JCNC helped much to expose the man-made nature of the starvation and the struggle of the Negrenses to overcome them. After the establishment of partner relationships with Manila-based as well as Negros-based POs and NGOs numerous rehabilitation projects were started and supported by JCNC in line with the Negrenses struggle for socio-economic alternatives.

In 1986, the different people's organizations and non-governmental organizations gathered and formed the Negros Council for Peace and Development (NCPD) which will serve as an island-wide socio-economic work service center. NCPD as a consortium would pool members' resources and coordinate the various sectors and their socio-economic efforts to be able to launch comprehensive and impactive programs for all members. Considering that the major concern then was to create a self-reliant agriculture, a campaign to acquire an agricultural training center was launched. And so in 1987, TUBURAN Technology and Research Center (TTRC) was established. Now, displaced sugar workers and able members of their communities could train in organic farming with the help of young and committed agriculturists.

By then, JCNC had already supported various projects with different organizations under the NCPD consortium such as communal farming, vegetable growing, coffee or fruits growing, fishing boat projects, *carabao* dispersals, goat

Peoples Agricultural Plan for the 21st Century (PAP21)

The hard lesson drawn from the FYDP experience (the banana disease) which almost negated the gains earned for several years reminded us of the importance of care for the soil. Putting too much emphasis on the economic aspects of the program/projects for care of the soil will make the undertaking unsustainable. For the poor farmers in Negros, the land is their life, hence taking care and enriching their land is equal to preserving their lives. JCNC's words "enrich the soil, enrich the people" is very appropriate. Such is also the strong spirit behind PAP21.

The process of finding the peoples' alternative has taken roots from the long years of development partnership between the Negrenses and JCNC. The continuous learning between partners was a struggle in itself as thesis and counterthesis were constantly heard and discussed as equal partners in true democratic spirit. As program concepts were dissected, a clearer perspective was derived each time they met until, finally, in a roundtable discussion held by the partners in January 6-7, 1995, a unity was reached to make PAP21 as an integral part of the development work in the island of Negros. PAP21 as the people alternative plan with agriculture as core will try to remake Negros economy that had long been subjected to monoculture of sugar. Hence, PAP21 will be the framework by which the partnership between Negros and JCNC will be defined from now on. It shall embody the vision of establishing a sustainable society where the organizing principle of public policy is the balancing of environment demands of human economic activity with the regenerative capacities of the earth's ecosystem. Its vision shall be anchored on Sustainable Development, a development that meets the needs of the present without compromising the ability of future generation to meet their won needs. PAP21 will address not only the quality of life but the greater flow of all creation. It shall work for the sustainable and equitable use of our natural resources and the preservation of our major life support systems such as land, forest, oceans and the atmosphere for future life. It shall strive to improve the quality of life of the people by working collectively for the equitable distribution of land and financial resources (through the implementation of genuine agrarian reform and equitable access to capital) and encourage the fullest participation and protection of the environment through sustainable agriculture as core and give more importance in regenerating the soil and species diversity.

PAP21 Activities

After its acceptance as an integral part of Negros development work, a working group to be called the PAP21 Committee was formed. It was composed of responsible persons from the different sector-farmers (Democratic Farmers Movement in the Province) and Balangon Growers Association (BGA), workers (Democratic Association of Labor Organizations), fisher folk (Association of Poor Fishermen), urban poor (Association of Urban Poor), agriculturist/ development workers from the support service institutions such as TUBURAN Technology and Research Center, Negros Council for Peace & Development (NCPD), Negros Relief & Rehabilitation Center (NRRC), Alter Trade Corporation (ATC) and JCNC represented by Seiko Ohashi. Seven pilot areas were agreed upon. The said committee was tasked to undertake the preliminary activities in recommended pilot areas by the different sectors. The objective of the initial activities was to be able to get the necessary baseline information from the different pilot areas so as to be able to chart a PAP21 Strategic Plan.

To ensure a level of success, it was required that all major sectors/POs assigned full-time representatives to the committee. The sectors' socio-eco staff and/or agriculturists were encouraged to be their full-time representatives. Out of the committee's membership, a core was selected to act as process facilitators/ documentors to ensure the recording of the activities and developments. All members of the committee were then divided into two field teams of 6-7 members each in preparation for the activities. Each team is multi-disciplinary in nature.

For the first time, fisher folks, urban poor dwellers, sugar workers and young agriculturists acted as researchers, going to the remotest of the villages in the rural areas to interview the rural folk and share with them their most basic concerns, dreams and visions in life. Likewise, a farmer went down to the highly urbanized area, to the garbage dumping site to talk with the poorest of the poor slum dwellers in one of the pilot areas during ocular visits. These visits gave the team a good grasp of the wide gap that existed even between the marginalized sectors of the society much more than between the marginalized and the affluent.

A trip to the other pilot areas in the countryside for example took 3 to 4 hours on bumpy roads which made you yearn for relaxing flat on your back on the grass. It somewhat saps you of your energies at first but once the people started to gather and showed great concern for your effects and do the best

they can for you to have a sip of their freshly-brewed coffee, you were instantly rejuvenated. The moment they started talking about their situation, it made one regain energies rapidly because you realized that your toil was just a shade of theirs. In most instances, we felt ashamed to think that we had come face to face with the very people who grew food for all; yet, they are the most depressed.

Pilot Areas

Basic considerations for specific pilot areas are its strategic location, land security/ownership, sectoral groupings within as target groups, impact on the community and the immediate surrounding communities. Since our target is to ensure circularity-linking of one sector to another, linking of one project/ services with another and the harmonizing of man-animal-plants-soil and other living organism in the ecosystem, it is imperative that the above considerations are taken into account.

Participatory Research

The committee decided that while going about doing research in the areas, the participation of the local people is to be ensured. Thus, the committee decided to use the Participatory Rural Appraisal (PRA). This method makes the PAP21 research team primarily as facilitator of the community meetings, discussions, group dynamics, livelihood sustainability analysis and other tools which rely much on the information elicited from active sharing of the community. The team just sparks discussions on important community concerns, systematizes, helps traffic and sums up discussion points and then documents the whole process. The whole community analyses, examines the ins and outs of their community life and in the end recommends solutions on how to solve them. All the materials produced are considered product of the rich and lively discussions of the community. Validation is done with the community before the team leaves for another area. The method is much suited since we have in our team sectoral/POs leaders who are from the pilot areas and who can establish the much needed trust and confidence among the people in the pilot areas towards a freer exchange of ideas and information.

After the training on PRA by the team members, the research began which lasted for about five months (March 95 - July 95) instead of three months due to bad weather, some changes in the committee's membership and our underestimation of the time-frame allowed for the community interactions. Colla-

tion of the research and its revalidation by the community including the community plans for seven pilot areas also took about two months. These community plans were made the basis for the PAP21 strategic plan (3-5 years) which was again subjected to the committee's review with the participation of the representatives of the pilot areas which was also finished last November 1995.

By the last quarter of 1995, initial implementation of pilot projects on the prioritized areas started after the social preparation package have been implemented. The fisher folk installed their fish traps and bought fishing nets and two motorized boats. Likewise, production activities were started by the peasants and sugar workers in their respective areas. The urban poor went on with their hog raising/fattening. Studies on how to integrate old and existing projects to new ones are being undertaken by the four basic sectors in their regular meetings within the PAP21. Committee Regular meetings are also venues for discussing monitoring results and assessments of activities where adjustments are made. Later on integration of the projects/programs and the sectors (farmers-workers-fisher folks-urban poor) will be realized in line with PAP21 objective of circularity and the establishment of an alternative economic system.

As the initial projects gets underway, a sustained campaign for PAP21 in the areas as well as in other venues like our advocacy releases and some fora initiated by JCNC in Japan continues. It is hoped that the building up of the momentum from our area discussions and other campaign venues would accelerate a gathering of people from the different pilot areas. As the movement becomes strong, a general assembly can be facilitated towards the building up of the PAP21 Center where the people's organizations are the main actors and can take over the overall implementation of the PAP21 Plan.

As soon as this happens, the Negros process has already come to a much clearer picture which will then be assessed and replicated in other communities within the island or even outside of the country where the people are willing to adopt the process.

Future Directions

For now PAP21 will be implementing the core programs as embodied in the Strategic Plan like the agricultural production, cooperative development, capability building/training program, the farmers-to-farmers exchange, and the delivery of basic social services. Likewise, support programs will be implemented such as post-harvest facility development, integration of livestock rais-

ing to production, and the credit assistance program out of funds coming from the Self-Reliance Fund (SRF). It is envisioned that the SRF shall evolve into a small people's bank which will further push the momentum of the people's alternatives.

Recently, the strategic plan was broken down into a more detailed yearly implementation plan to serve as concrete guide for action in Negros and in Japan. This would also help us in the monitoring, evaluation and the substantial documentation of the whole unfolding PAP21 processes.

A PAP21 Center will ultimately be established to provide for a venue whereby the basic sectors are integrated and can plan and chart their own development alternatives towards a genuine people s development.

—MICHELE MOLINA
Negros Council for Peace and Development
February 1996

SOUTH KOREA

Our wheat revival movement in South Korea

Our wheat revival movement which has rapidly spread out since 1989 in South Korea, may be considered as a new type of movement with alternative development orientation in the context of grassroots farmers' empowerment, preservation of ecological balances, coping against center- countries-oriented world trade, and building up community solidarity by increasing mutual understanding between urban consumers and rural farmers as producers.

1. How our wheat revival movement has been nurtured

Our wheat revival movement in August 1995 covered 16,000,000 sq. km. wheat cultivating area, 160,000 membership and U.S.$ 450,000,000 running capital, which made it possible to purchase our wheat amounting to 12,000,000 kg. per year. The purchased wheat has been made into flour in three factories and used for noodles, bread, wheat tea and then sold in 1,000 Our Wheat and farmers' association chain of shops. Our flour has been supplied to Koryodang company (one of South Korea's most famous bread manufacturing companies), Bori food company for raw noodle, Samyang food company for ramyon. Recently our flour has been widely used for biscuits, hot pepper sauce, soy bean sauce and liquor, etc. Our flour chain restaurants have widely spread out in Taegu, Youngdong, Chunchon, Uijeongbu, Taejon and Tokyo.

of both the government and social movement that have focused on factory workers' initiatives, especially after the Uruguay Round and World Trade Organization permitted the importation of cheap foreign agricultural products and left no room for farmers in the domestic market. With our wheat revival movement's faithful promise to purchase their crops—thus guaranteeing production cost and reasonable profits—farmers who hitherto had been under the mercy of sales merchants could concentrate themselves exclusively on producing. More farmers and more fields have thus been involved in our wheat revival movement. Every year, wheat fields have almost doubled in area.

2) Our wheat revival movement explores "business type movement", which promises to give the participants economic returns. It persuades the participants not only to resist the present system, but also to be given back gains from the movement. One of the reasons of rapid growth can be explained with this "gains logic". Our wheat revival movement has contributed to augment farmers' income. Wheat can be cultivated using winter time, when farming other crops is impossible, with low production cost and not much labor required.

3) Our wheat revival movement has emphasized producers' initiative in manufacturing and marketing process. Producers, especially farmers, have often been cast aside in the creation of additional value which comes from the manufacturing, distribution and marketing process. Our wheat movement emphasizes farmers' initiative in producing additional values. Our wheat revival movement organization have established farmers' flour factories, hot pepper sauce factory and liquor factory. Another flour factory and biscuit factory are in the drawing boards.

4) Our wheat revival movement has stimulated to revive not only our wheat but also other agricultural products such as bean, liquor and medical weeds. In the process, the rural community itself is revived. Our bean revival movement has already been started by 6,000 our wheat producers. Our rural community revival movement is ready to start with its education program.

5) Our wheat movement makes consumers sensitive to food chemical pollution and conscious of production and manufactur-

ing process. It can enhance the communication between consumers and producers, as well as solidarity between city and country dwellers. The movement protects consumers from harmful preservatives and chemical treatments used for the prolonged production and storage of flour imports. Our wheat can be cultivated without chemical treatment because it is planted late autumn and cropped before rainy season. Our wheat revival movement can protect the fields and people who make a living on our wheat. Being deeply-rooted, the soil can breathe actively and can resist diseases without chemical treatment. Therefore our wheat revival movement can be a cornerstone in the "revival movement".

6) Our wheat revival movement gives us relative independence from American agricultural products policy, which makes the countries dependent on imported agricultural products under their control. Especially in South Korea, flour as the main agricultural staple for the daily westernized table has been imported mostly from the USA Our wheat revival movement has aimed to supply 10% (320,000 t) of total wheat demand.

7) Our wheat revival movement makes participants more sensitive to the environment. The movement emphasizes air cleaning effect and contributes to the protection of the environment from air pollution. During winter, when green vegetation is rare, wheat in the cold fields converts CO_2 into O_2. Therefore, if wheat was planted on 1 million ha. fields, it could make 10,560,000 t CO_2 into 7,680,000 t O_2, which amount to 10% of total green woods contribution. Our wheat also contributes to preserve clean water. It absorbs rain or snow and preserves it as underground water.

3. Problems and Prospects

1) How to successfully combine business with the movement is the key problem from hereon. Until now our wheat revival movement has been more movement oriented and suppliers-initiated market. The main target has been to increase wheat fields and wheat productivity. Membership increased due to interest in gaining ac-

cess to our chemical-free flour. To participate actively in the "revival movement" also relieved some people from a sense of guilt in their non-participation in the democratization process which could put them in jail or kick them out from the job market. However, the situation has changed. With the rapid growth of our wheat productivity, the organization should ponder about sales and marketing in competition with cheap imported flour. The relative strength ascribable to its non-chemical treatment appeals to middle class consumers who are concerned with health problems. However, as time went on, the middle class consumers who frown upon chemically over-treated imported flour, are getting impatient with the chemically-polluted surroundings. They became insensitive to chemical treatments and became more sensitive to price. Lessening production cost (U.S.$35/ 40 kg wheat in S. Korea, U.S.$5 in USA, U.S.$7.5 in Canada) has become an urgent issue. Quality is another issue. Our flour is not so sticky as imported flour. Without apparent differentials in quality, it is very difficult for the consumers to be persuaded to buy the flour at a higher price.

2) Another problem comes from sales network. Because our flour products have been sold only at the special chain shops, for lay consumers it is still difficult to buy our flour and its products. Department stores and general supermarket chain stores controlled by the big tycoon Chaibol demand high sales margin (40-50%) and would not allow a 10-15 % sales margin. Faced with this unfair situation, the organization opened "Woori-mil (our wheat) restaurants" in expressway rest areas. The challenge is to persuade the merchants to sell Woori-mil products in spite of low profit margin under the "Salim Woondong" flag.

3) How to organize the movement's members is also important point. Members have increased continuously at the rate of 4,393 per month in 1993 and 5,849 per month in 1994. The organization has aimed at an increase of 7,000 per month in 1995. To increase members continuously and to organize them adequately is one of the most important tasks in movement. However, the staffs and management system are far from adequate. Until now, membership management has been dependent on one or two staffs' self sacrifices. Decentrali-

zation process in membership management should be accelerated. Urban-centered memberships (92.1% in city, Capital area 62.8%) should be balanced with special emphasis on rural membership increase. Developing membership management system through intimate communication is urgent.

4) Business-type movement is vulnerable to commercial interests. Some local branches and official aids participated in our wheat production, our flour manufacture and our flour products sales not for movement orientation but for commercial interests and political considerations. Some companies tried to use movement's image to advertise their own products.

5) Finally the most important problem is how to keep a movement orientation in this business type of movement. How to make consumers sensitive to environmental issues and production process is the difficult problem to be worked out.

4. New Programs

1) To emphasize the decentralization process, the organization is planning to induce local governments to participate actively in the movement. For example, Seoul city explored wheat fields on the Han riverside to purify the polluted air and to give rural flavor to the citizens. The organization is persuading other local governments to follow the Seoul city model. In certain counties, the county center partially supported our wheat production cost. That type of support can be a breakthrough in competition with cheap imported flour.

2) To increase membership by organization, including local governments, schools and companies can be hitting two birds with one stone. It can be an escape from limited sales network and from disadvantaged competition. Already there are many organizational membership in universities, local governments, laboratories, Catholic churches where the members can purchase our flour wheat products at the organization level, share their green experiences and become watchdogs in environmental issues.

3) Another program to get over the disadvantaged competition with imported cheap flour is to induce official restaurants and school meals to use our flour. As government has made it a rule to eat flour products at least once a day leading to increased consumption level of imported flour, so should the movement organization urge the authorities to use our flour meal in schools and local governments to increase our flour consumption level while protecting children and citizens from chemical-treated products and air pollution. The consumption level of our flour still remains at 1% of imported flour.

4) One of the main purposes of our wheat revival movement is to restore indigenous cultures, which has been set aside in the industrialization process. Different kinds of noodles combined with local special products such as Ginseng noodles in Chungchong province, arrowroot noodles, buckwheat noodles in Kangwon province, brown sea weed noodles in Jonnam province have been developed. The organization will support each local branch to find out its own specialties and to build up local centers responsible for production, manufacturing, and marketing.

5) To revive our wheat is the first step to revive our community. Our wheat revival movement has been followed by other movements: bean revival, flower revival and buckwheat revival. To give life to our children and to revive our river are likewise important programs for the organization to launch. The organization tries to mobilize government resources and public resources, especially mass media, to meet those aims.

—LEE, JUNG OK
Professor in Department of Sociology in Hyosung Catholic University
—CHUNG, SUNG HEON
President of Our Wheat Revival Movement

THAILAND

Organic Farming in Thailand

COUNTRY PROFILE

1. Location

Thailand is located at the heart of Southeast Asia. In the west and north it has a common border with Myanmar, in the northeast with Laos, in the southeast with Cambodia, and in the south with Malaysia. The total area of the country is 513,114 sq.km.

The country is not geographically homogenous and the following regions are distinguished: The North, the Northeast, the Central region and the South.

Table 1. Land Utilization of Thailand by region, 1991

Region	*Total area* (km^2)	*Forest area* (km^2)	*Farm Holding* (km^2)	*Unclassified* (km^2)
Northern	169,644	77,142	47,031	45,471
Northeast	158,854	21,799	92,349	54,706
Central Plain	103,901	24,307	45,808	33,786
South	70,715	13,449	27,734	29,532
Whole Kingdom	583,114	163,697	212,922	162,495
Percentage Value	100%	26.64%	41.503%	31.86%

Thailand is classified by region in the table below.

Table 3. Utilization of Farm Holding Land of Thailand by Region, 1991

Region	*Farm holding land*						
	Total	*Housing*	*Paddy*	*Field crop*	*Fruit Fower Vegetable*	*Livestock*	*Onions*
North	47,031	1,508	24,315	16,760	3,247	215	986
Northeast	92,349	2,004	60,756	21,528	3,285	632	4,144
Central Plain	45,808	1,364	20,049	15,101	7,502	100	1,591
South	27,734	782	5,780	240	19,496	87	1,351
Total	212,922	5,558	110,900	53,629	33,530	1,132	8,072
Percentage	100%	2.55%	52.08%	25.19%	15.75%	0.54%	3.70%

6. Agricultural Growth

6.1 Transition

Thailand has long been known as a rice economy. Traditional rice farming has been largely practised by Thai farmers who produced for self-sufficiency for with the advent of modern technology, chemical compounds were introduced to increase production. At this time, rice was not only the staple food of the Thai people but also the country's major agricultural product. Later, it was the main source of government revenue for decades. In 1962, it was estimated that the rice export premium alone contributed to about 10 percent of the total revenues of the government.

Since the early sixties, the government has realised the danger of overdependency on only one major agriculture product. The government began to introduce an agricultural diversification programme with emphasis on maize, kenaf, cassava and sorghum. The major portion of these crops was produced mainly for export. This contributes significantly to the overall agricultural growth of Thailand.

The expansion in agricultural production was possible due to the increase of rural population and the easy availability of uncleared forest land in the country as well as expansion of the road network.

Commercialized agriculture has encouraged farmers to adopt high-yield-

ing varieties and new technology. At the same time, this also inevitably involved a marked increase in production costs; therefore, farmers also needed use credit for farming operation.

6.2 Effect and Impact

The growth of agricultural sector from the end of the 1960s made Thailand a major food surplus country of the world. With this substantial agricultural surplus, the country was able to mobilise funding to improve infrastructure in all regions and to start the industrialization process.

Meanwhile, accompanying the growth were diverse effects and impacts.

7. Sustainable Agriculture

7.1 Perspectives

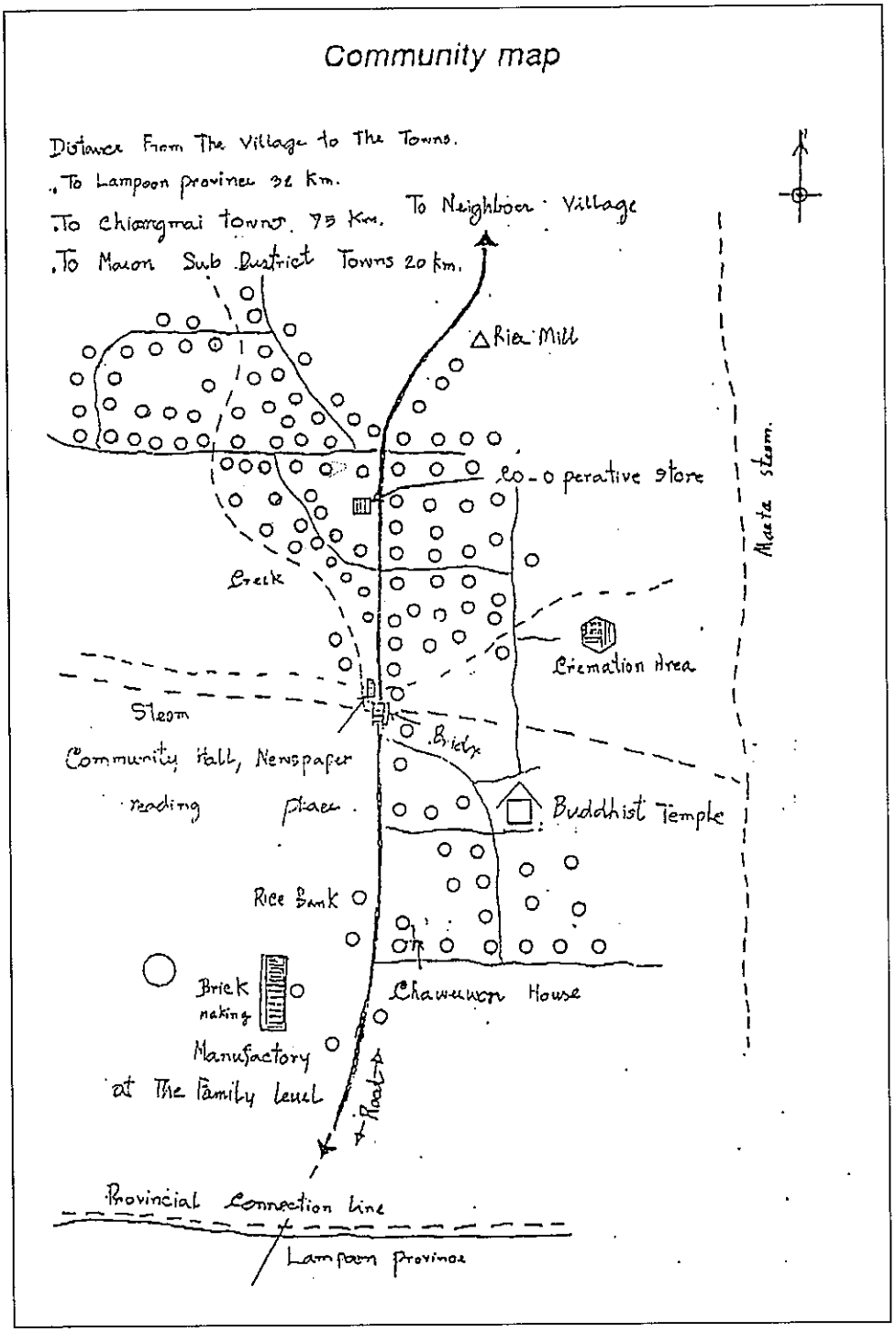
Most farmers defined sustainable agriculture as a way of life that is in harmony with nature and humans, relies on farmers' knowledge and appropriate and sound farming systems. It improves the environment and prevents soil erosion. It reduces investment, debt, dependency, land use and external input. Another result is the increase in income and food self-sufficiency. Sustainable agriculture has become the alternative to mainstream agriculture in Thailand. According to alternative agriculture, farmers can reduce market dependency and the use of chemicals while feeding their families with good quality food.

7.2 Different Farms and Origins

Sustainable agriculture has emerged in Thailand in different forms and origins. Actually, a farmer practicing a sustainable agriculture cannot easily copy ready-made techniques from fellow farmers. The farmer must still experiment with the techniques before applying them at a farm.

7.3 Portrait of NGOs in Sustainable Agriculture.

Thai Development Newsletter, No 27-26, reported that there are only 0.4 percent or approximately 20,000 households out of the national farming population of five million. But in terms of NGOs, a survey revealed that over 50 NGOs work on sustainable agriculture in Thailand. This number does not include numerous farmer organizations.


Community map
Distance From The Village to The Towns.
To Lampoon province 32 Km.
To Chiangmai town 75 Km.
To Maeon Sub District Towns 20 Km.
To Neighboor Village
Rice Mill
Co-operative store
Creek
Maeta stream.
Cremation Area
Steam
Community Hall, Newspaper reading place.
Bridge
Buddhist Temple
Rice Bank
Brick making Manufactory at The Family level
Chaweuwan House
Road
Provincial Connection line
Lampoon Province

Farmer:
MISS CHAWEEWAN KAMPENG

Village Introduction

1. General situation

Ban panod, Village no. 5, Mae-ta Subdistrict (Tambon), Mae-On District (King Amphoe), Chiang Mai Province. In the past the people cut trees in the forest for train firewood and later planted tobacco and chili. At present, there are about 127 households. Their main occupation is farming. They are confronted with various problems, especially economic such as landlessness. They do not have water for planting. Their land is unfertilized. They are exploited by middle men. Most of the villagers have to buy rice because the land could not be utilised for the past 2 years from 1992 to 1993. At the same time cash crops could not be produced. Hence, unemployment became a problem. Many of them have to migrate to the city to look for a job. Some of them have to pay a high fee for working abroad. Besides, consumerism became worse and the traditional culture disappeared.

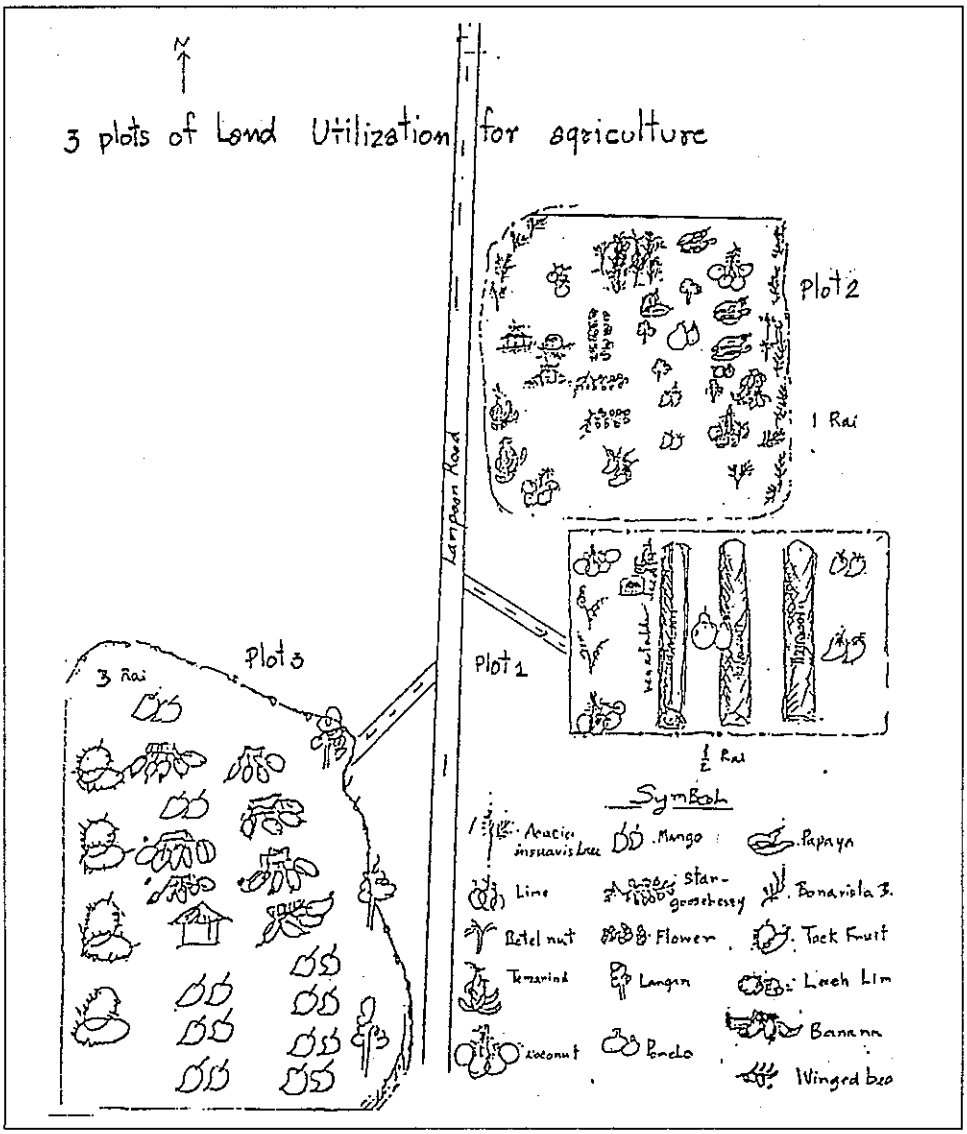
In the past, there were less people and the forest was fertile. Natural resources such as land and water were abundant and there was enough food to share for everybody. Today a number of logging concessions have been awarded to several companies, namely:

1. Teak concession to foreign companies
2. Planting Teak concession to private companies
3. Maikayaloy concession
4. Railway wood concession
5. Train fire wood concession
6. Firewood concession for tobacco factory

The problem of deforestation was not just caused by company concessions; it was aggravated by people who cleared the forest for agricultural promotion with an eye on the export market. They began to import chemical fertilizer and other kinds of chemical inputs to use in plantations with all their adverse ef-

fects on the environment and human health, and the imbalance of resources.

Currently, as the problem worsened many villagers organised themselves to solve it. They tried to preserve their community forest by organising training seminars, exchange experiences and set up regulations to manage rationally the natural resources. With a view to solving deforestation, villagers have to look for alternatives based on self reliance. Some of them for instance, have gone into other jobs that appropriate to vegetable farming without chemicals.



Family background

Chaweewan is female and single; she looks after her old parents and siblings. She is the third child with two elder brothers and a sister, the youngest.

Members of Her Family

Name/Surname	*Age*	*Knowledge & Skill*	*Health*	*Responsibility (Reproductive) Production Income*
1. Mr. Peng Kampeng	78	Primary school Handy man Retired farmer	Old, has pain in his legs if he walks much	Father; head of the family Repairs house and equipment
2. Mrs. Zawn Kampeng	79	Primary school grade 4, Housewife who looks after weaving	Old, usually suffers from headaches	Retired housewife; takes care of household chores Helps her daughter do some light work, e.g., seeding and picking harmful insects
3. Mr. Suwat Kampeng	37	Primary school grade 2 Brick construction worker	Healthy	Single, elder brother of Chaweewan Daily worker receiving ~3000 baht ($120) a month a portion of which helps support family
4. Mr. Chaweewan Kampeng	35	Primary school grade4, a house work farmer gardener	Healthy	Takes care of the family Earns a living on agriculture and food processing Member of the village's Alternative Agricultural group
5. Mr. Supat Kampeng	33	Secondary school grade 6; employed as a clerk	Healthy	Lives in Lampang Province and visits home on holidays; gives part of earnings for support of family

less time on her vegetable field. After soil preparation and cultivation, she gets help from her nephews next door to look after her vegetables, for example watering. Her parents also can assist her in watering and gardening the vegetables. Chaweewan has time for fruit processing, which she prefers. She can join the cremation when some relative or neighbour dies, or the celebration of special occasions. Her family have much more food to eat. She buys food from off-farm sources for about 30 to 50 baht a day. Her income comes from more resources:

1. Sales of vegetable and fruit, banana, papaya
2. Sales of fruit processing product
3. Sales of fresh fruit by season, (mangoes, jackfruit, langon).
4. Rental from the rice field after harvesting.
5. Some support from her elder brother and younger sister who are still single.

Looking to the future, she wants to raise her income from sales of the vegetables and fruit processing products to about B 5,000 a month also to make people in general to understand and practice organic gardening. These are reasons for Chaweewan to give her time and energy in support of the Association of organic vegetable producers.

Benefits from membership in the association:

1. Financial support to the member in need of it.
2. Opportunity for sharing and learning new ideas and techniques.
3. Empowering the group to be more efficient in marketing and in requesting support from the government.
4. The group has more credit and receives good cooperation from other consumer groups.
5. This activity enlightens the villagers and the community to see the necessity for forestry conservation. The village has a foresting reservation group.

Farmer:
MRS. PORNPIT PUADPUD'S FAMILY

Pornpit is 46 years old (in 1996). Her husband, Boonlam Puanpud, is 53. They have two daughters, aged 18 and 16. Both are single. The eldest is a school dropout—she finished secondary school grade 3—but the youngest is studying at a commercial college in Sakolnakon province.

The family earns a living on three field areas (15)

No.	Size (rai)	Distance from house	Features	Land use	Land owner
1	2	500 m	Rainfed. Sandy soil.	Paddy field Sticky rice cultivation A little bit sloping	Family Rice yield: 200-1350 kg/crop
2	3	2.5 km	Same as no. 1	Paddy field Sticky rice cultivation Rice yield: 1800 kg/crop	 Family
3	10	30 km	Rainfed. High land.	7 rai for cassava cultivation and A little bit 3 rai divided sloping to experiment in agro-forestry	Declared conserved forest The Natural Park

Pornpit grew up in Ban Donkean, so her experiences are confined to the village. She recalls that when she was young, many wild animals roamed the green forest of Phupek-Phulaom Khao mountain. Her family went up the hill to clear the forest for cash crop cultivation just as their neighbours did. Her family occupied 10 rai (4 acres) for cultivation. In 1980 the former government instituted policies to expel the communists by clearing the forests that were

their hiding place. (During the years 1971-1980 there was internal war between the government and the Communist Party.) One government policy awarded concession rights to the logging companies and declaration to the people who wanted to acquire farms for cash crops, kenaf, cassava, sugarcane, etc. required by agro-industrial companies.

Deforestation reached crisis proportions during the period 1976-84. Three hypothesized reasons are behind it. One is population growth; each family needed to extend its farm land for the new generation when it grows up. Another is the need and demand for cash to exchange for food, other essential goods and luxuries. Yet another reason is the large-scale operation of the logging companies, which built access roads to the forest. However, once land clearing started, not only the logged area was cleared but also the surrounding area. A byproduct of the operation was an accumulation of dried branches and leaves, which the villagers set on fire to prepare the ground for cassava planting. The upshot is massive deforestation.

Mrs. Pornpit's family occupied the hill area in 1982 (2525). Her family's attitude toward use of the hill did not differ from the neighbours. They did not understand the government declaration that excluded the hill area of Phupek-Phulaom Kao mountain as a reserve forest, which means that cultivation was disallowed. What confused the villagers further was the concession given by the government to a mill company in 1979.

All this led to another kind of crisis. A government official declared that the villagers were guilty of illegal logging and cultivation in the forest reserve. He called a meeting with the villagers to announce the launching of a reforestation project whose purpose was to plant fast-growing trees, Eucalyptus. The project is the so-called "forest farming", but the villagers were afraid that if they grew the trees they did not have the right to cut them; besides, the project left them with no more land for farming cash crops, which is their main source of income of about 5,000 baht ($200).

Villagers are faced with any number of farming-related problems, among them inadequate land, shortage of irrigation water and low and uncertain market prices for their products. Although cassava gives them less profit and requires plenty of chemical fertilizer because of infertile soil, labour cost and uncertain price, cassava processing factories were a ready market. Moreover, cassava grows easily and does not need much attention (except weed control). Some villagers now use herbicide control.

Turning point

Mrs. Pornpit's family has realized that the villagers must themselves be living examples of good citizens who do not fall on and destroy the forest. They have used the land for cultivation before its declaration as a conserved forest and The National Park. The villagers have not enough land to eke out a living upon. They need the guarantee of cultivation right on the land they used to occupy and they want to prove that they can deal with the reforestation areas by:

1) decreasing the areas for cassava cultivation
2) giving up the use of chemical fertilizer, pesticide and herbicide
3) growing trees—fruit trees, wild trees, multipurpose trees, nitrogen-fixing trees—in the context of a diverse, integrated system
4) recovering the forest for the people and rehabilitating the environment.

In 1990 The Community Forest Project, as an NGO, started working with the community by analyzing the problem and the situation at the local, regional and national levels. Project workers also analyzed the effect of cassava cultivation, organized meetings, training workshops and farm visits in terms of sustainable development, its concepts and principles and the alternative ways of cultivation and agro-forestry. Mrs. Pornpit took the chance to join the project activities.

In the 1991 cultivation season she chose a section of three rai from the 10-rais cassava area. She grew fruit trees such as banana, mango, tamarind and jackfruit. After one year she discovered that the banana trees could grow easily and provide shade to the other plants, and begin to bear fruit after a year and a half. After the area had been used for cassava cultivation continuously the soil had become very poor. Hence it had to be improved. One way was to cover the ground with organic matter like rice straw and allowing it to rot before plowing into the soil. Another was to grow leguminous plans and nitrogen-fixing trees between the rows of fruit trees. Then fast-growing vegetables and plants were planted so as to turn a profit sooner.

In 1992 Mrs. Pornpit's family started to grow vegetables, namely, red onion, chili, egg plant and cucumber. She used the area close to the creek, whence water was fetched for irrigating the plants. The harvested vegetables have since been sold to the Saturday market in Ban Nakoo subdistrict. Needless to say,

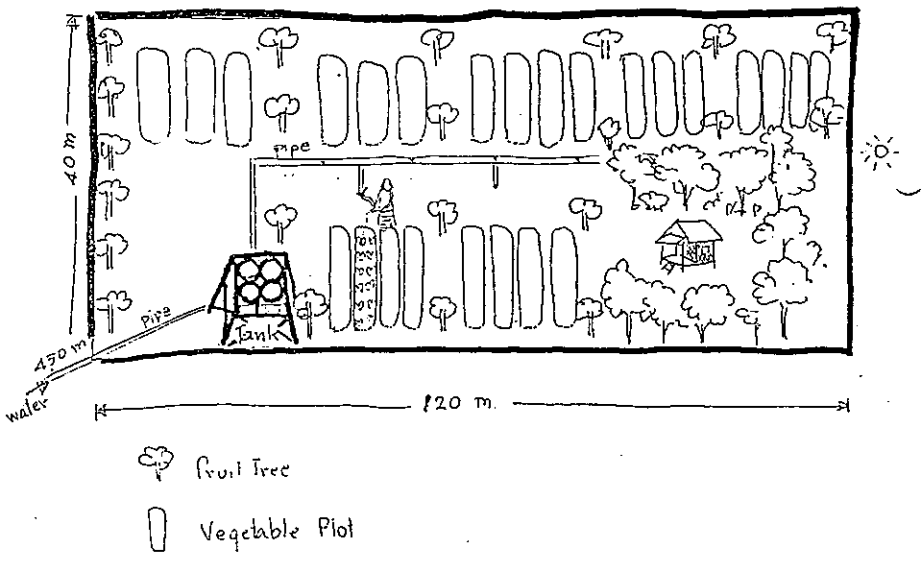
part of the harvest —fresh, chemicals-free vegetables—landed on the family's dining table.

From its vegetable farm the family derived an income of Baht 900-1,000 a month (US $36-40). Furthermore the young trees benefited from the "runoff" of water and fertilizer applied to the vegetable plots. In 1995 the family borrowed money from the Community forest project to finance the purchase of a pumping petrol machine, a big tank and PVC pipes to secure water from a natural water source in the valley, 450 metres away. The labour-saving system has made the farm more productive.

Mrs. Pornpit has taken a deep interest in vegetable and fruit processing from local production, which is comprised of banana, papaya, star gooseberry, sour tamarind, jackfruit, etc. As chairperson of the women's group she encouraged her members to participate in the training course in 1995. Some of them have been able to produce for sale banana chips, star gooseberry, papaya and tamarind.

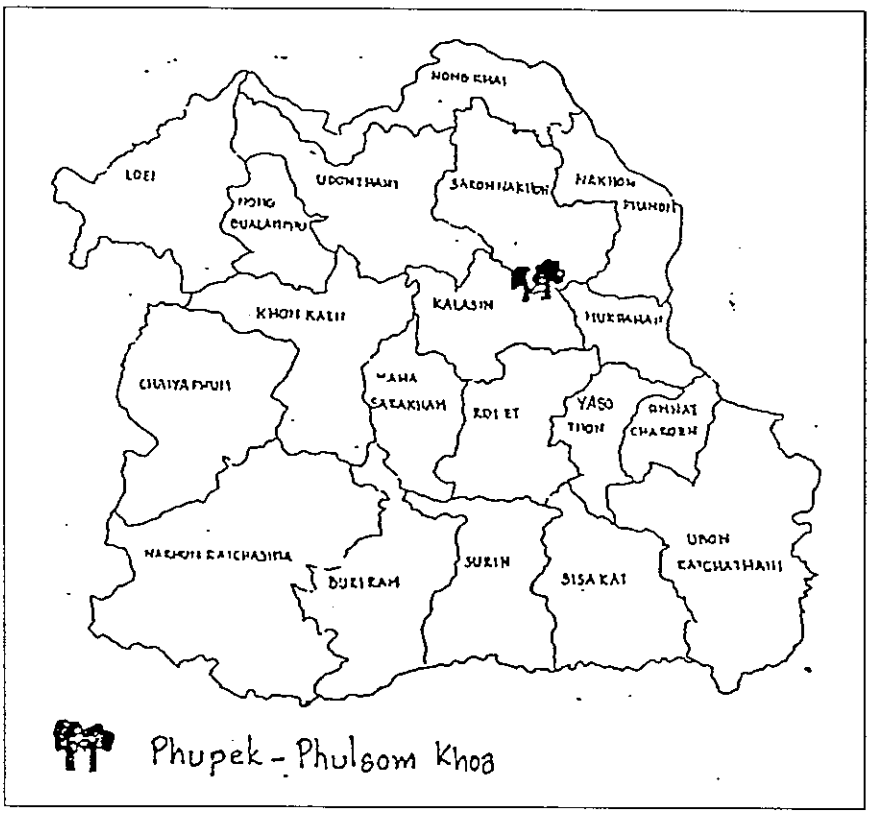
Mrs. Pornpit does not work alone. Her husband and her eldest daughter assist her in decision making and in farm work. She is an active woman who takes every opportunity to develop herself. She is sold on the idea of group work.

PORNPIT'S FARM



Cross Sector of Pronpit's farm

Getting to know Phupek-Phulaom khoa Mountain



The Failure of Peasantry Commodity in Market Economy Mechanism: A Case Study on Hard Crops Market of Indigenous Peasants in Sikka

1. BRIEF INFO ON SIKKA

a. Macro Economy Condition

Sikka makes up part of Flores' five regencies under the East Nusa Tenggare Province administration.

Maumere-Sikka's capital town is the most important port town, the heart of Flores trading traffic since it is located on the calm Flores north sea. Being in a very strategic position, economic activity is the most striking among the five regencies, although Sikka is the least fertile area in Flores. Its annual income (Regional Gross Product) is more or less Rp. 127.5 billion per year.

b. Geography

Sikka's area is 1,731.91 km. Like most areas in East Nusa Tenggara, it is ruggedly mountainous, dry and in some points very barren.

c. Population and Livelihood

Sikka's current population is 24,759, 710 of which 80% are peasants, 3.7% are fishers and the rest are civil servants, Chinese and small-scale merchants.

Most of the peasants are upland farmers. People grow "hard" productive plants such as tamarind, cashew nut, walnut, cacao and coconut as well as some quick-harvesting crops like banana, manioc and maize. Wetland agriculture is very limited.

Besides, people also raise family animal husbandry; cow, pig, goat and poultry farm. Women, on the other hand, play a great role to support family earnings where they do hand weaving cloth.

2. PROBLEM STATEMENT

As it is the least fertile area (although suitable for hard crops cultivation), Sikka relies on crops export revenue to support its Regional Gross Product. To that extent the peasants are its main economic support.

However, peasants are disappointed by current market circumstances. The commodity market is markedly different compared to the 1970s through the end of 1980s. Prices are in decline while those of basic needs are going higher and higher.

Seemingly peasants are consigned to become "bad loser" by the macro economy mechanism and business treadmill.

Such desperate circumstances point to the indigenous peasants' vulnerability. Our observations conclude that the unfavorable commodity market, which results in sharp decline of price, is characterized by the following factors:

▸ The abolition of primary manufacture. Until 1981 there were several factories run by the Chinese in Maumere; these included coconut oil and soap factories. Since then, these primary manufactures were moved out to Ulungpandeng (South Sulawesi) or in some areas in Java. Raw material supplies such as copra for oil and soap production had to pass through the abovementioned places. Consequently, the buying price in Maumere was reduced to compensate the additional burden costs. The removal of primary manufactures was very much correlated to centralized and monopolistic economy.

▸ Kooperasi Unit Desa (KUD) or Village Cooperation Unit does not work properly. It is necessary to state here that Indonesia does not strictly adopt the "free fight liberalism" economic system. It means that liberal competition would have no place in a cooperative economy system like Indonesia. So the New Order regime feels obliged to form village cooperation units (KUD) to provide security from undesirable business practices. Ironically, the presence of KUD, which was aimed at empowering crop producers, has seemed to render them helpless! KUD actually serves as a steered sole agent. Its managers are responsible for the intricate trading treadmill. And in the process, Sikka producers have been "out casted" from KUD management while "outsiders" were invisibly intervening and controlling the market.
As a consequence, the producers have no choice but to sell out their crops.

▸ Over lined trading order
Let us take copra trading in Sikka as an example which results costly lines:

LINE I Peasants are obliged to sell copra at Tempat Pembelian Komoditi (Commodity Purchasing Unit) at Rp. 550/Kg (approx. 0.275 US$).

LINE II Copra is transported to warehouse; transportation cost is Rp. 20/Kg (0.01 US$) (Chinese transport means).

LINE III In addition, warehouse storing charges Rp. 50 (0.025 US$) per kilogram. The warehouses belong to Chinese.

LINE IV Inter-island shipping to Ujungpandang costs Rp. 100 (app. 0.05 US$) each kilogram for transportation. The ships belong to Chinese.

LINE V Copra sold to the local distributor in Ujungpandang at Rp.950 each kg (app. 0.475 US$). Local distributor is Chinese.

LINE VI The local distributor hands over copra to Matahari soap factory at Rp.1,200 (0.6 US$) each kilogram.

Locally, a peasant could earn Rp.750 (0.375 US$) for each kilogram of copra. But KUD cannot be blamed for depressing the buying price since it has to

operate with the required lines which adds a burden cost of Rp.270 (0.135 US$) per kilogram.

Rp.270/kg can be saved to lift the buying price if KUD is willing to chop down LINES III and V. In case KUD buys copra at Rp.750/kg then sells it at Rp.1,200 in Matahari soap factory in Ujungpandang, the difference is Rp.450/kg. So its net margin will be Rp.280/kg with the assumption that KUD shares Rp.170/kg for warehousing and transport and shipping (LINE II, III, IV).

Unfortunately, KUD is too exhausted in coping with the peasants' gripes.

3. CASE ANALYSES

As a result of centralized and institutionalized monopoly, KUD and BTN (Regional Trading Board) have not adequately served as effective mediators. The producers must sell their crops to KUD but have no power to control it. The board does not represent peasants but the interests of big merchants and entrepreneurs.

The peasants are subdued by unfair economy treatment, brought on by their weak bargaining position caused by two conditions. Firstly, rural economic resources are exploited to subsidize powerful entrepreneurs (conglomerates) with "pressed-down price". Secondly, manufactured goods are then redistributed to peasant-consumers at extremely high prices! So the harder a peasant works the poorer he becomes, while the merchants (entrepreneurs) are getting richer in a relatively short time!

What disadvantages the peasants commodity market in the economic struggle process is the application of monopolistic trading systems through:

- rule of economy and regulations aiming at securing macro economy policy
- abolition/closing of in site primary manufactures by various economic arguments
- large-scale entrepreneur engages in collusion with government officials to suppress the producers by hook or by crook
- untransparent market information causing KUD and entrepreneurs to "play cat and mouse" on price at will.

4. ALTERNATIVE STRATEGY

To redress the problem we propose an alternative strategy for overall indigenous people's products marketing.

a. On-going marketing program

Women's handicraft cloth marketing in cooperation with OXFAM-UK and WALHI (Indonesian Forum for Environment), by taking advantage of international events like the NGO Forum on Women conference at Beijing and the Jakarta Bio-forum, Biodiversity Convention last year. In these events the handwoven clothes were sold at more than Rp.100,000/piece (app.50 US$) while in Flores it is priced only at Rp.25,000 - Rp.50,000/piece (12.5 - 25 US$).

b. Programme to be applied

To set up a Joint Marketing Networking for Peasantry Commodity (JAMASATIRA) with national NGO counterparts aimed at chopping down prolonged trading lines. JAMASATIRA will always stick to stipulated buying price by BTN in order to avoid legal market chaos.

For instance, applicable buying price of copra is Rp.550/kg (app. 0.275 US$) and wholesaler price in Ujungpandang is Rp. 2,000/kg (app. 1 US$). If the cost for local transportation, warehousing and inter-island shipping amounts to Rp. 170/kg (app. 0.085 US$) kg and SANRES sells the copra at Rp. 1,200 each kilogram, the difference will be Rp.1,200 (Rp.550 + Rp.170) = Rp. 480/kg. SANRES would take Rp.200/kg for its profit and share the rest of the margin (=Rp. 280/kg) to producers; so that the total selling price will be Rp.830 each kg. The remaining payment (=Rp. 280/kg) will be reserved or saved at BPR on behalf of producers.

Feasibilities:

- politically JAMASATIRA can be worked out since there is a regional/ national economic rule that allows for connected organizations to participate in commodity trading.
- at the moment SANRES has 57 community groups of peasant and fisher folks. Each has a Group Meeting Court which is also used as TPK.
- SANRES has teamed up with YMU (The Institute of Entrepreneurs Partner), a distinguished and influential NGO based in Jakarta.

Obstacles:

SANRES does not have its own warehouse nor transportation fleet. The boat for inter-island shipping is currently under construction.

Plans:

To set up BPR (People's Credit Union Bank) based on the experiences of the Grameen Bank System. The establishment of BPR is in cooperation with Flores NGOs and YMU. The official opening of the BPR is targeted in May 1996.

5. CLOSING NOTES

The vulnerability of indigenous peasants in Sikka-Flores in economic struggle is very much correlated with unfair structures and centralized political economy operating both national and international levels.

By way of ending this case study, I wish that South-South countries together with those of the North will, in a collaborative effort, formulate and implement alternative and integrating marketing efforts in the very near future.

—PAULUS NONG SUSAR
Maumere, February 6, 1996

by practice its effects would be understood and results would be believed.

The package consists of the following practices:

i. It recommends a cropping pattern, that follows the weather patterns and climactic rhythm of an agroclimactic zone.

ii. Minimal tillage. The soil is never turned but loosened with forks, country plough or tyne cultivator. Then a layer of compost is applied and covered with mulch for 3-6 weeks before seeding planting seedlings. This keeps the soil well aerated and reduces the weed population.

iii. Mixed cropping and five-course rotation of crops is adopted. Following the fifth component of rotation is recommended.

iv. Few trees or even few bushes are allowed in the fields to get the benefits provided by trees.

v. No weed control measures are adopted except managing weeds to a degree in which heavy shading is avoided.

vi. Making composts, preparation of farm liquid manure. (Appendix I)

vii. Use of kems (kind of practices connected with astrology, manthatrams and herbs) for crop protection from pests and wild animals. Failing kems plant extracts are used for insect pest management.

viii. Use of astrology and spirits or spiritual process for crop protection and yield improvements (Appendix II). The practices mentioned are done in conjunction with the principles of:

a. Recycling. The farm wastes are recycled via composting, liquid manures and mulching.

b. Regeneration. Establishing contour hedges in the field provides nitrogen rich leafy materials and offers the benefits of trees. Repeated harvesting of foliage provide ample organic matter to arable lands.

c. Repeated use. This is not reuse, but using one material repeatedly to obtain different products or uses, for example straw first used for mushroom production, then partially decayed straw for biogas production and finally digested matter as animal feed and manure.

Adoption of these three principles and package takes some time for farmers

who have been practising modern agriculture. The most serious factor observed is nitrogen deficiency. Unless some precaution is taken yield decrease is inevitable. To avoid this a small quantity of chemical Nitrogenous fertilizers (eg. 5 kg urea per acre per application) mixed with 20% of its weight with powdered Neem Seeds, and 10-20 times of its weight of good matured composts, heaped for 12-24 hrs. and applied in the evening. This is necessary only for 2 to 3 seasons. Depending on the fertility of the soil, 2 or 3 applications may be necessary for a crop.

Based on experience for the last four years with the package and with farmers scattered in different parts of the country, it can be stated that the ecological agriculture is without doubt

i. Highly profitable as there are no cash inputs and less labour involvement is needed.
ii. Yields are comparable with high external-input agriculture both in wet and high land.
iii. Continuous soil fertility improvement and continuous yield increases season after season (there will be a peck after a number of seasons).
iv. Soil erosion is almost nil.
v. Reappearance of birds and reptiles such as rat snakes.
vi. A return to normal vegetation.

For biodiversity, rehabilitating damaged ecosystems, sustaining food production and for the benefit of unborn generation, this agriculture model can be an alternative. It is certainly an alternative development strategy which can only be properly understood in practice.

In conclusion a humble appeal is made to extremist scientists who sticks to predetermined theories, to individuals who themselves are elevated to scientist level with paper qualifications, and to refrain from destructive comments, until they themselves apply this package and undergo the experience of practising it.

Appendix I

Liquid manure preparation.

i. With stinging nettle as in Biodynamic agriculture.
ii. Fresh cow dung is mixed with one and half times the volume of water in a tank or vessel to which some leguminous leaves are immersed.

In about three weeks a well digested liquid manure is formed. This liquid is mixed with three times of its volume and applied to crops. This can also be practised in paddy cultivation.

Appendix II

In kems the following practices are included.

i. Pirith that is Buddist stanzas and manthra are used to charm pebbles, sand, water and ash for crop protection and yield improvements.

ii. Certain plant extract, leaves, branches etc. are used in different ways for crop protection.

iii. Certain activities are performed at particular astrological setting for protection.

iv. Auspicious times are used for different operations for trouble-free crop production and high yields.

—G.K. UPAWANSA
Heneford, Dekinda Sri Lanka

Organic Farming Case Study in Sri Lanka

Districts chosen: Moneragala, Trincomalee, Anuradapura, Matale
Period under review: Jan. 1995 - Jan. 1996
The problem: Excessive and careless use of agrochemicals; health hazard pollution; and ecological damage

Program worked out by: Four women's organizations with a total membership of 1943

- 43 preschools with 1247 children
- 23 Saturday classes with 1185 students
- 81 healing homes

Significant events:

Seven women activists from Anuradapura and Matale districts conducted a survey among 100 women on the use of pesticides. This was done in response to a request made by PAN-AP (Pesticide Action Network Asia Pacific)

July 1995

Nine women activists chosen by 3 women's organisations who joined a special national program called CIDSE 2000, completed this training program in organic farming.

December 1995

Our Centre organised the South Asian Seminars on Sustainable Agriculture for representatives from 6 countries. This decision was taken during the World Assembly of Fimarc (International Federation of Catholic Rural Adult Movements). For the exposure program the participants were sent to two organic farms in Dekinda of Galaha.

January 1996

Twenty seven women from Anuradapura and Matale districts were sent to the organic farm in Dekinda for residential training under Mr. G.K. Upawansa.

Wash done:

- The seven activists from Anuradapura and Matale districts discussed the findings of the survey on Women and Pesticides during their monthly meetings. While encouraging the women to observe safety measures and use less agrochemicals, they also urged them to take up organic farming.
- The nine women activists from three district organisations conducted an initial survey on nutrition among 900 women. After their training they conducted training programs at the village level for the women in the organisation.
- In the Monaragala district, 400 women were interviewed. After the demonstration and training, they grew soya, green gram, cowpea, bitter gourd, peanuts, tomatoes and brinjals. Except for soya, the produce was sold to small traders. The women's organisation has planned to buy the soya and sell it to members in the women's associations.
- In all the districts, a number of women made a liquid from neem seeds and used it as a worm-insect controller. They also made, and applied successfully, liquid manure using drumstick leaves, ipil-ipil, neem leaves, griseelia, etc.

The teachers and health volunteer workers who are also members of the women's associations made a specific contribution as demonstrated in the following examples.

The health volunteers put up relevant posters, pamphlets, etc. in their homes,

close to the medicinal cupboards, so that people coming for first aid or to buy indigenous medicine could read them.

Many health workers had compost pits. A number of them grew herbal gardens for the benefit of the community.

The teachers improvised various methods like drama and song to give the kids and children some idea about the harmful effects of agrochemicals.

In Monaragala district the teachers staged a dramatic play on nutrition, which was performed in many pre-schools. After each performance they discussed it with the children. The result was the kids helped the teachers to make compost, planting fruit trees and growing vegetables.

The same play likewise proved effective for the students in the Saturday classes.

In the preschools the teachers organised a fair where only organically grown vegetables, green leaves and fruits were sold.

The Centre made its contribution in the following ways:

- Facilitating training programs with the help of professionals, for 32 women activists from the four districts, on participatory development process.
- Sending 27 women from two district women's organisations for training in organic farming
- Obtaining the services of agricultural instructors and paving the way for the organisations to obtain seeds for alternative home gardens and herbal gardens.

Impact

- The women have proved that as life givers they are capable of being life sowers. The hundreds of women directly involved in the program have not only made qualitative and nutritional changes in the food pattern of their families, but also have asserted themselves within the family and even in the village as capable, knowledgeable persons.

The teachers have instilled such values in the children and students as made them in their own little way sensitive to issues such as deforesta-

nature. Unfortunately, everything that depends on nature suffers as a result. What the Green Revolutionists did not realize is this —that agriculture is part of nature, as well as they themselves, along with the whole of humanity!

Rather than to acquiesce in the problems now faced, we have chosen to ask the question, "Is it possible to reverse the present trend of agriculture? If so, what can and should we do?" With this framework of mind, CAP decided to go ahead with the farm extension programme in 1993.

FUNDAMENTALS OF THE FARM EXTENSION PROGRAMME

From the beginning, the Farm Extension Programme was designed to present practical solutions to various problems in the areas of the environment (e.g., pollution, soil, biodiversity and nutrient erosion), health (e.g., pesticide contamination of food, poisoning) and the rural socio-economy (e.g., poverty, unemployment, idle land), and in the process introduce a system of rural development that is sustainable.

One of the criteria of our farming method is the non-use of agrochemicals. The accumulation of biomass and biodiversity is also of priority. Above all, the planting designs are attuned towards the economic requirements of the practicing farmers so that not only are they able to move towards self-sufficiency, but also towards some sort of financial stability.

As a solution to these, we have chosen to develop a permanent tree-based type of farming which is much more ecologically logical than the high-input, high-wastage modern form. To satisfy the short-term income issue of farmers, we recommended that they try growing pesticide-free vegetables as there is a demand for such produce in Penang.

As a result of our ecologically compatible farming system, pollution and erosion could be brought to a minimum. Biodiversity is greatly increased and the produce are free from chemical contamination and farmers are better able to predict their income with the reduced marketing pressure of the alternative market.

Farm inputs are also decreased and with it the expenditure and the need for cash which has been the main cause of poverty in the rural areas.

By facilitating the marketing of these farm produce, the Farm Extension Programme has given farmers the initiative to work their land again, creating

work and income opportunities for the rural folks. Many farmers have become quite interested in our programme. In fact, by establishing an alternative market (via the concept of sustainable farming) to the existing one, we are actually enhancing the survival of many farmers who have virtually lost all marketing power to the middlemen and fluctuating markets.

In essence, the Farm Extension Program is about the development and the practice of a system of agriculture that is able to realistically solve the problems caused by the present non-sustainable agricultural practices and to a certain extent the rapidly changing economic situation of the country. In the long term, it could evolve into a standard alternative rural development plan that takes into account the people, the environment and the economy.

CAP'S EXPERIENCE

In 1993, CAP approached several farmers who were owners of land in Kuala Ketil, Kedah. The farmers were losing interest in farming as it was not enough to support their family. These families were not able to survive from their land alone and therefore had to look for additional income.

Further, with the commercialisation of agriculture, sale of cash crops is the only source of income for farmers to rely on to sustain their family's livelihood. The fluctuating price of cash crops like rubber did not promise a steady income. The farmers' dependence on chemical fertilizers and pesticides, further aggravated their problem. Understandably, they felt discouraged and demoralised, and had intentions of giving up their way of life and to seek employment in the city or in a factory.

We spent a long time encouraging and motivating the farmers. They were oriented towards a chemical-free model of agriculture and shown many possible farming alternatives. Initially the farmers were quite skeptical of our "green" approach. Technically, there were many aspects that we had to identify and overcome at the farm level—soil fertility, irrigation, pests, diseases, weeds, herbivores, soil structure, the weather, energy, labour, etc. Conventional farming arms the farmer with tools and techniques to deal sufficiently with most of the above aspects.

Production technology in sustainable agriculture is much more complicated than technology in chemical-intensive farming. Understanding and making the life cycles of the environment work for the farm is a complex process.

CASE STUDY

Arshad and his family own two acres of land in Kuala Ketil. The land was formerly cultivated with hill-rice to sustain the family. In the 1970s Arshad's father opted to take up rubber planting as it was the major cash crop then. Income from the rubber-small holding was in the range of RM50-300 per month depending on the weather. This alone was not enough to sustain his family of nine.

Arshad's mother and his siblings had to tap rubber in other small-holdings to supplement their income. Now, the size of the family has grown proportionately, while rubber price was fluctuating. The young women in the house were attracted to jobs in the city, which offers more lucrative income. This would mean moving away from the family.

Two other pioneer farmers that CAP had approached were facing similar problems. Budin and Ahmad owned four acres of land each. Like many farmers, they were losing interest in farming for they were not earning enough to support their families.

All three farmers committed themselves to give pesticide-free farming a try.

MANAGEMENT FEATURES

The landscape of the farms is gently rolling. The farmers grow leafy vegetables such as spinach, mustard, kai lan, pak choy; fruit vegetables include ladies' finger, brinjal, long beans, cucumber and chili; and fruits like bananas, papayas, star fruit and maize.

Budin and Ahmad also have orchards where they grow seasonal fruits. Ahmad has livestock too, with cows, goats and chicken besides his vegetable farm and orchard. Another farmer, Wan Busu, who has just ventured into organic farming, has a fish pond and grows vegetables and medicinal herbs in his land.

The farmers resorted to mechanized tilling as manual tilling consumes labour and time that the farmers cannot spare. Management of the farm is a family affair. Initially the farmers were supplied seeds by CAP and also from their locality. Now, after much experimentation, they sow the best varieties that grow well.

The farmers were encouraged to use cow dung as manure instead expensive

chemical-fertilisers. Then, there were also chicken manure, compost, liquid manure from their homes that served as cost-free, readily available and effective fertilizer.

Because consumers, with few exceptions, demand blemish-free fresh vegetables with cosmetic appeal, commercial-scale vegetable growers are compelled to use pesticides to produce fruit and vegetables free of insect or disease damage. Consequently, vegetable growers spend a great deal of time and money protecting their crops to ensure this cosmetic appeal.

CAP has made an effort to raise the awareness of consumers on the dangers of pesticides and to accept their vegetables no matter how it looks. Many of our buyers do not mind the pockmarked greens and fruits not of the standard size, as they know that these are healthy and safe to consume.

From experience, the farmers found that the overall ambiance of the farm has an influence on pests. A healthy farm with well-nourished vegetables and fruits and with improved soil fertility does not attract many pests. The farmers also let slow-spreading weed to grow to offer an alternative to the pests.

Timely harvest is also important. Vegetables and fruits are harvested when still vigourous. If you wait too long the crops are disease-prone and tend to attract pests.

One of the worst problems of farming is weed control. With conventional farming, a spray of say, "Roundup" or "Paraquat" or one of the pre-emergent sprays enables the farmer to depress the weed growth for well over two months with each application. Our alternative, hand-weeding, is liable to reduce the farmer to a nervous wreck, especially during the wet season.

One farmer, Wan Busu is using the mulching method to control weed. Besides using vegetable cut-offs, he collects dry paddy stalks. Our farmers are now thinking of using plastic to cover the grounds. This has resulted in a debate as ecological farming does not warrant the use of plastic sheets. On the other hand, the farmers feel that it is a more practical way of weed control. They are still at a crossroads now.

CAP realized that creating a market for the produce of the farms was essential to sustain the programme. There is a reasonably good demand for pesticide-free vegetables in the locality of Penang and its surrounding areas.

We opened a market in our office and the vegetables were transported about 60 kms from the farms to Penang. Initially, sustaining the market with a consistent supply of farm products was a problem. With much of the work still at the

experimental stage, the farmers had their hands full trying to produce pesticide-free products of reasonable quality and quantity.

Consequently, the marketing suffered as did, in turn, the financial security of the farmers. Motivating the farmers during this stage was most challenging. Many could not see the potential of the programme beyond the initial lack of success. Nevertheless, the pioneers did stick with the programme.

On September 18, 1995, the Northern region of Peninsular Malaysia experienced one of the worst floods it had encountered. None of our farmers were spared. It was especially disheartening for them because, after trying for so long, the farms were then slowly but surely taking shape positively. The floods devastated months of hard work.

The ensuing rainy period provided the farmers with a most harrowing time. There was little they could do to undo the damage in consistently paddy-field-like conditions. Rehabilitation has begun with the subsiding of the monsoon in December.

One positive aspect did come out of this trying period. We were forced to concentrate on our farming techniques and face our weaknesses. Through this experience, we became adept in our very own alternative farming method derived through first hand experience.

FUTURE DIRECTIONS

CAP's aim is to establish model sustainable farms. In doing so, we were concentrating on developing each participants' property into ecologically functioning agro-forestry project. We set aside separate areas within each project for the participants to grow cash crops for two purposes—self-sufficiency and to market the excess produces for short-term income (adopted from the Thai experience). When the farmers started to grow their own vegetables, they managed to cut down significantly their food bills.

Because of the degree of technical proficiency achieved through our research during the past two years, we are now able to guide new participants in the know-how of sustainable agriculture. More importantly, the alternative market that CAP has managed to establish through the efforts of many serves as the major attraction and motivation for farmers to give sustainable agriculture a try.

We have also arranged for talks to different groups of people regarding our effort to develop sustainable agriculture in Malaysia and have generally received positive responses from them. During a recent visit to a rice-cum-vegetable growing region, over 50 farmers turned up to find out more about pesticide-free vegetable farming and marketing. Many farmers are searching for such alternatives.

The pesticide-free farming has generated quite a bit of curiosity amongst the farming communities of Pendang in Kedah. Some of the farmers are quite ready to plunge into it while others are contented to observe how the pioneers would fare. Nevertheless, the Farm Extension Programme has caught the attention of many farmers.

Also, because the Farm Extension Program had evolved with realistic considerations of the rural communities in mind, many farmers can identify with it. Technically and administratively, they are quite open to our views. We believe that once these farmers look into the farming package that we have to offer, many would be convinced and motivated to give it a try. What's more, these are seasoned, genuine, independent farmers.

Eventually, it is envisaged that more and more farmers would come to a point of financial security and self-sufficiency via our Farm Extension Program. Satisfaction for CAP would be the development of sustainable farms all over the country due to our initial effort.

—CONSUMERS' ASSOCIATION OF PENANG
Macalister Road, PENANG
Malaysia Tel: 604-2293511 Fax: 604-2298106

NEPAL

People's Initiative for Alternative Development Through Social Forestry: A Case Study of a Nepalese Village Community of Landless Poor*

Abstract

The prevailing dominant development paradigm has created an ecologically hostile consumer society in every part of the world and pushed much of humanity to the brink of social disaster and dehumanization. This paradigm promoted greed, unhealthy competition and the desire to dominate and control resources instead of promoting the sustainable use of resources, cooperation, equity and social justice.

The alternative development paradigm must consist of two interactive dimensions: social and ecological sustainability. Sustainable development and environmental protection have been the dominant themes in the development

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* *This is an abridged version of the original paper submitted by Dr. Upreti. A copy of the complete version can be requested from the publishers.*

discourse all over the world. Social forestry has been conceived as a strategy capable of meeting rural people's basic needs while protecting the environment, thereby contributing to sustainable development. Nevertheless, construction of good social forestry to solve the basic needs of the poor and landless is as difficult as it is seemingly appealing. Government-sponsored social forestry programs have become a failure with respect to solving poor and landless people's basic needs such as fuelwood, fodder and timber.

The case study on one such program in the Chitwan district of Nepal indicated some impressive results not usually seen in government-sponsored social forestry programs. This can be a good example of how landless poor people's organized and determined efforts lead to resource development and environmental protection with no or very little outside help.

Nepal's Experiences with Social Forestry

The government of Nepal nationalized all forests in 1957. Forests became national property and accessible to everyone. Some scholars believe that this policy resulted in excessive logging and the loss of many indigenous forest management systems (Chitrakar, 1994). In 1976, the government formulated the first National Forestry which emphasized participatory forest management. This plan put all forests into five categories: government, community, private, leasehold and religious. In 1988, a Master Plan for the Forestry Sector identified community forestry as its major program. Nepal's policy on social or community forestry involves the transfer of authority and responsibility for managing forestlands from the government to village users. Despite a massive investment in community forestry programs, there are not many success stories. These programs have become a failure in meeting the poor and landless people's basic needs such as fuelwood, fodder and timber.

Indigenous Forest Management System in Nepal

Many types of indigenous forest management systems exist in Nepal. Nepalese villagers and farmers have a long and rich tradition of managing the forest; in the process, they have accumulated a wealth of indigenous knowledge

about forest resource extraction, production and protection.

In the past, Nepalese people used to be the natural custodian of the surrounding forest. From their day-to-day interaction with the forest ecosystem, they evolved a deeper understanding and appreciation of the surrounding forest because it provided them with the basic material needs in the form of timber, fuelwoods, medicines, fodder, grazing space for animals and leaf litters as well as the ecological services in the form of water, oxygen, flood and landslide prevention and regulation of hydrological cycles. They may not be able to interpret the complex ecological processes that give rise to those ecological services exactly in scientific terms, but they knew from experience that a healthy forest around their farms meant a good harvest of their crop, healthy animals and adequate food production. Experience also told them that the farming system they had developed over the millennia has been organically linked with the forest ecosystem and if something wrong happened to the forest, this would be manifested in their farming system and eventually in their own lives.

Perhaps because of this deep and profound understanding of their forest and its impact on their lives, the village community developed a forest protection and management system. The village community used to appoint a watchman who was highly knowledgeable about the forest and its functioning. The responsibility of the watchman was to protect the forest from theft, fire and unsustainable extraction practices. He marked trees to be harvested by the villagers and supervised the collection of fuelwoods, fodder and grasses. He paid special attention to the protection of trees, shrubs and vegetation adjacent to natural water sources: natural spring, fountains, rivers and lakes. Though unfamiliar with the modern concept of watershed management, he knew that devegetation of the watershed would cause natural water streams and springs to dry up as would, eventually, the village community and its farming system.

It was also the responsibility of the watchman to inform the village community about the status of the forest in general and, in particular, its water resources, fodder and fuelwood availability, forest herbal and medicinal plants and finally the problems and prospects of forest management. In return for his valuable services, the watchman was paid by the village community in kind, i.e., food grains (rather than cash). The system was popularly known as Mana Pathi.

This rich indigenous knowledge and management system is disappearing, perhaps because it could not penetrate the wall of the modern academia and

research center, whence the modern knowledge system and development models emanate. For many academicians, researchers, planners and administrators trained in the dominant development paradigm, perhaps the modern or scientific knowledge system means the negation of the indigenous knowledge system. Though the worldviews of many modern development pundits do not easily lend themselves to recognize and incorporate the rich indigenous knowledge systems noted earlier, and some have begun to genuinely recognize and appreciate this knowledge system. In fact, scholars have pointed out two functions of the indigenous knowledge system (Messerchmidt and Hammett, 1994):

1. Indigenous knowledge functions as storehouse of understanding on which villagers act in relation to the farm/forest environment;
2. It is the foundation for local alternative forest resource (AFR) and forest management, product utilization and marketing.

It is important for forestry development staffs to recognize, understand and appreciate indigenous knowledge and management systems so they can respond to local people's needs and provide relevant technical assistance. Equally important, these staffs should evolve, organize and systematically use this knowledge system and holders of the knowledge in the development, management, utilization and conservation of forest resource through social forestry action programs (afforestation, farm forestry and agroforestry).

Social Forestry: *A Case Study of a Nepalese Village Community of Landless Poor*

This study represents a typical case of a poor landless community's organized efforts to survive and develop as a community primarily through social forestry programs along with other income-generating activities. The village community is located in the eastern part of Nepal's Chitwan, about 150 km southeast of Kathmandu valley.

Nepal witnessed an unprecedented landslide and floods causing enormous human tragedy and economic loss in 1990. Chitwan was one of the worst flood-affected districts. Landslides and flood swept away many villages and completely destroyed the farm and croplands of people, resulting in massive displacement.

The worst floods occurred in the Piple Village Development Committee (VDC), where a thousand people were displaced and farmlands rendered completely useless.

The Piple VDC has eleven wards. A ward is the smallest administrative and political unit consisting of several villages. Gaduali is a village of ward no. 7, located on the northern side of East-West Highway. Ward no. 8 was worst hit by the 1990 flood, completely destroying homes and displacing 200 households in this village alone. Farm and forest lands were devastated. The flood swept away houses, animals and 40 villagers, particularly children and the aged.

The displaced victims were allowed to settle in the communal and government-controlled forest lands of Gaduali village. The communal land was distributed on the basis of the Kupoon (coupon) system, which earned the village's name, Kupoontole. The village consists of 200 households with approximately 1,000 people.

The flood victims of 1990 were allocated a small piece of land just enough for each family to build a house on—10 dhur of land (150 sq. meter). Before the flood, the household families had cropland and livestock and were able to feed their families. They practiced subsistence farming and had not encountered the crisis they had to undergo since the flood. They were reduced to a landless class dependent on their wage labor for livelihood. Some households grew crops on the rich farmers' land and shared crop with the landowners. The landowners obtained more than 50% of the produce from shared cropping. Some members of households migrated to other areas in search of employment and better opportunities.

The average size of the household is 6 members and the total population of the Kupoontole is little over 1000. The community is a mixed one consisting of Brahmins, Chettri, Newars, and socially marginalized castes such as Damai (tailor), Kami (iron tools makers), Chepang and Danuar (hill forest tribes). Majority of the households are Chepangs, the socio-economically most marginalized sector. Most of the people are illiterate (70%) who do not have access to drinking water and basic health care. The community as a whole is landless and labor is the only source of livelihood.

Rural Reconstruction Nepal (RRN), a people-centered development NGO, was the first organization that reached the newly established Kupoontole village with relief programs and income-generating activities to create an enabling environment for the people. With assistance from Caritas Nepal, RRN initiated

woolweaving training to help women earn some income. A woman from each household participated in the training. This proved to be a stepping stone for the village poor to undertake other resource-development activities. Now woolweaving has become the main source of their income and livelihood. Along with this skill development training, RRN initiated an adult literacy and loan program to increase the productive capacity of the people.

People's Initiative on Forest Conservation

The flood of 1990 destroyed a number of villages in Chitwan district and displaced a large number of people who settled in the open access areas of the Northern forest. The pressure on the natural forest increased tremendously; gradually the open access forest areas were being converted into agriculture. However, the settlers did not cut down forest trees: they only collected the dead branches, twigs and non-timber dead woods for fuel.

The forest degradation was caused by something else. When the flood victims settled in these areas, the powerful timber loggers, feudal elite and illegal timber traders all took advantage of their unfortunate plight. The latter took advantage of the situation to extract illegally as much forest timber as they could since they could use the settlers as scapegoats. The illegal timber extraction and tree cutting increased substantially. The degradation and destruction of the surrounding forest accelerated at an unprecedented rate. Illegal trading of timber forest and forest fire critically affected the forest conditions. Natural water springs began to dry up and the undergrowth forest cover on the forest floor rapidly disappeared. The cumulative impact of all these factors (illegal forest extraction, forest fire, and the destruction of forest floor vegetation) manifested in the crisis of the community of flood victims that settled in the forest open access areas. The devastating flood of 1994 further exacerbated their crisis.

Silently witnessing this unfortunate destruction of the surrounding forest ecosystem and its impacts on their daily lives, some public-spirited individuals of Kupoontole decided to do something about the protection and conservation of their surrounding forest. They decided to launch some action activities to protect and conserve their surrounding forest by initiating the social forestry program. These individuals approached RRN with this plan and received some material assistance from the social forestry program of RRN.

Formation of Forest Protection Committee

The impacts of RRN's community capacity-building and income-generating activities in Kupoontole village can be measured in terms of evolving strong leadership in the community. The sense of organized strength, mutual help and cooperation is strong; so is the desire to take collective initiative, and motivation to mobilize available resources for the benefits of the community. The formation of Forest Protection without any outside intervention is a testimonial to the evolving leadership in the community and its organized efforts to mobilize resources for the benefit of the community.

RRN included a number of interested individuals from Kupoontole community in its social forestry training program. After its completion, RRN conducted participant observation tours to various agroforestry and social forestry projects. The training and observation tour had a very positive impact on the trainees which resulted in the formation of forest protection committee and consequently the development of the social forestry program in Kupoontole.

Rules and Regulatory Mechanism

For proper protection and care of planted trees and nursery, forest protection committee has laid the following rules:

1. If a planted tree seedling is destroyed by goat, cattle or animal, the owner of the animal will be subjected to a fine of Rs 50 (US $1).
2. If naturally grown timber forest trees such as Sal and Sisso in the planted area is cut down, the culprit will be fined US $100.
3. The poorest landless member of the community will be allocated 0.4 ha of planted land area to grow maize, millet and wheat for three years. The care and protection of the planted trees become the tillers' responsibility who will be subjected to punitive action if found negligent.
4. The looping and harvesting of the twigs and branches of the trees must be conducted under the supervision of the forest protection committee and the product will be distributed equitably.
5. The participation of the community member in the tree planting, nurs-

ery management and protection of the planted trees is compulsory and is performed on a rotational basis. Usually one member of the family on a rotational basis looks after the planted trees daily. The same is true with nursery management.

6. The money obtained from the sale of seedlings to outsiders and the collected fines will be invested in the management of nursery, and plantation and protection activities of tree seedlings.

Social Forestry Program Activities

The community initiated a number of social forestry action programs. The FPC initiates, plans and mobilizes human and material resources for various afforestation and social forestry program activities. Among the various activities are:

1. Afforestation of Deforested Hill and Forest Land. The first afforestation program activity conducted by the forest protection committee resulted in replanting the completely denuded hill of the nearby forest. In the beginning RRN provided the seedlings of the multi-purpose trees, plants for fodder and fast-growing fuelwood species as well as technical support. Everybody—youth, women, children, and even aged people—participated enthusiastically in tree planting which lasted for five days. The area covered by tree plantation was approximately seven hectares of the hill.
2. Establishment of Community Nursery. The FPC established a permanent community nursery to supply the program with seedlings of multi-purpose trees, particularly locally adaptive fodder plants, timber and fuelwood species. The nursery maintains a stock of 60 to 80 thousand seedlings. Nursery maintenance activities are carried out on a rotational basis. The groups collect the seeds of promising, fast-growing adaptive tree species and raise seedlings in the nursery. The participation of women and children in seeds collection, seedling raising and nursery maintenance is particularly noticeable. The nursery occupies an area of .04 ha. of land. From time to time, RRN technical staffs supervise the nursery and provide technical advice to the committee.

3. Tree Plantation Activities. After the establishment of the nursery, the FPC organized a number of planned and systematic tree plantation activities. The first planned tree plantation activity was launched in 1994. The committee mobilized community members and planted about 15,000 tree seedlings on 10 hectares of land. Their own nursery supplied the seedlings. The survival rate of planted seedlings was 95%, impressive by any standard. The reason behind the success of tree plantation program and high survival rate of seedlings can be attributed to a number of factors such as enthusiastic participation of community members (both young and old), strict code of conduct, and supervision and care of the planted seedlings. The forest protection committee formulated and implemented strict social regulatory rules and a mechanism to protect and care the planted seedlings.

The FPC divided the total tree planted land areas into seven categories with a view to protect better the seedlings and utilize the land resource for productive activity. The planted plots were allocated to the landless and poorest members of the community and allowed them to cultivate the plots to grow maize, millet and wheat between the rows of planted seedlings for three years provided the seedlings are not damaged. It is the responsibility of the members to take care of and protect the seedlings. Evidently the cultivation practices had a very positive impact on the growth and development of the planted seedlings.

The second plantation activity was organized in 1995. The community extended plantation on eight hectares of additional land. Again, the new plantation plots were allocated to the landless poor to grow maize, millet and wheat.

The FPC invited the direct forest officer (DFO) to inaugurate their plantation program in 1995. The forest officers, social workers and development pundits were highly impressed by the community's afforestation activities and the success they achieved in the management of land through social forestry. They were forced to change their arrogant attitudes and impression about this community. In the past, the district forest office displayed a highly negative attitude towards the community; for instance, forest officers blamed and implicated the community for deforestation and degradation of the forest. But the situation has since changed. They realized and recognized the production potential of the poor and landless people and duly acknowledged the services rendered by

the community to protect and conserve the surrounding forest. The DFO expressed his desire to hand over the surrounding forest to the community for protection, conservation and sustainable use.

Beginning in 1996, the Kupoontole community is planning to start cultivating economically important medicinal and herbal plants and spices such as ginger and turmeric. The poorest members will get the highest priority. It is expected that this will further enhance their economic condition and well-being.

Until now the community has planted trees on 25 hectares of lands. Within the next five years, the forest protection committee expects to plant trees on another 25 hectares of forest land.

Conclusion

Resource development—by way of social forestry aimed at meeting the basic needs and requirements of the community—has generated impressive participation of the members of this community in seedling plantation, protection of planted seedlings and management of the nursery. Even children and the aged have taken part in these activities. Women's participation in social forestry program activities was nothing short of spectacular.

District forest officers, development experts and planners were all impressed by the success and achievement of this community in social forestry programs. They realized that government-sponsored community forestry programs with considerable investment do not come even close to the achievements of this community, which has not received any financial and material support from the government. It was something they had expected from the poor and landless who were and still are blamed for the degradation and destruction of forests all over the world. The development experts, administrators, forestry officers and policy makers trained in the current dominant development paradigm had always undermined the productive potential of the poor and had always implicated poor people in deforestation and environmental destruction. On the contrary, it is the small and poor farmers who have protected forest ecosystem in most parts of the world because they have developed an organic linkage and relationship with forest ecosystems from time immemorial. They know better and understand better how forest products and forest ecosystem services are essential for their survival and well-being.

It is the rich and socially dominant class of the society that has destroyed this organic linkage with forest ecosystem. It is this class in the society that cannot establish organic linkage with nature simply because its epistemological paradigm is rooted not in the soil, nature and forest but in the industrial technometabolism and artificially created culture of consumerism.

—DR. GOPI UPRETI

Executive Director, National Academy for Afforestation and Environmental Conservation Institute of Agriculture and Animal Science (IAAS), Tribhuvan University, Nepal in collaboration with Informal Sector Service Center (INSEC)

JAPAN

Okitama Women's Network

The Okitama Women's Network (OWN) was organized in 1990 by a handful of women living a farming life in Okitama region of Yamagata Prefecture. Half of the members are women farmers and the other half are engaged in other occupations such as teaching, labor movement, veterinary, etc. OWN is an independent local women's group whose aim is to search for an alternative lifestyle and new rural community based on equality and sustainability.

Background

Local Agriculture. In Okitama region, people have developed and maintained local agriculture by growing rice, vegetables and fruits, and raising cattle. Due to much snow in winter, after the 1950s and '60s (Japan's high economic growth era) chief male laborers in farming families became *dekasegi* or migrant workers during the winter season engaged mostly in construction work in distant cities such as Tokyo. Other industries came into the region in the form of subsidiary companies absorbing labor from farming families. The government's liberalization policy intensified in the 1980s and 1990s and the number of farming families decreased dramatically (now accounting for 10-20% of the total local labor force). Many full-time farmers have gone part-time and most farming families have left the farming the in the hands of the aged.

Development. As the number of residents in local communities decreased, large-scale development projects constructing dams, golf courses and roads were brought in affecting community lives and the ecosystem. Some of these development projects were stopped or suspended but other proceeded relocating residents to other areas.

Social Changes.

The traditional agricultural way of life is disappearing and commercialism permeates the community. Company life replaced the agricultural communal life undermining residents' community consciousness.

However, the traditional patriarchal form of farming families remain and the position of women remains low both in the family and in the local community. They are still treated as *yome* (married women belonging to her husband's family) and expected to do house chores, child-care and care of aged people. When her husband dies, ownership of the land and the property is to be subsumed by the traditional patriarchal farming family, local single women have started to reject marriage to the successor of a farming family. The recent trend is that successors of farming families marry women from other Asian countries such as the Philippines, Thailand, Korea and China whom they meet through the mediation of the town office or private marriage brokers (there are over 1,000 foreign women married to Japanese living in Yamagata Prefecture). These women face several problems deriving from language and cultural barriers and discrimination.

OWN's Activity.

▸ organizing study meeting with such themes as the patriarchal family system, alternative education for disabled people, self-sufficient supply for school lunch;

▸ organizing open forums on themes like food and international marriage in the local area

▸ organizing local events like mini-concerts presenting the people's struggle on the Negros island and free markets promoting local self-sufficiency and environmental protection.

SHIRATAKA FOOD PROCESSING FARMERS' COLLECTIVE

History of Agriculture in Japan after WWII

Farmland reform after World War II concerned the emancipation of the independent farmer. From 1950 onwards there was an increase in the production of food and increase in demand and subsequently an increase in the use of chemical fertilizers, pesticides, and farm machinery.

The Mutual Security Act (MSA) of 1954 resulted in the rapid decrease of the state budget which had previously been allotted for agriculture and forestry. MSA wheat purchases caused an initial 25 % drop in allocated finances for 1954 and by 1956 the budget was a mere half of what it had been three years earlier.

The result of this postwar expansion resulted in the increased cost of farming and the need for borrowing money. A further result of this expansion was the male farmers were required to work away from home, mostly in construction jobs, in order to pay debts owed to the banks. What came to be known as "three-person farming" was a situation whereby the wife, grandmother and grandfather were the primary workers keeping the farm in operation.

By 1970 there was a surplus of rice. While farming had grown, the other "half" of the country was involved in the large-scale development of industry. In 1972, a legislative act was enacted which sought to decrease the farmer population in order the bring the rice surplus down. The legislation forced farmers to decrease their rice fields by an area of 20%. Such legislation was forced upon the people.

Many farmers stopped planting altogether and began taking permanent jobs in factories. The pay was low, and the hours were long. This situation continued gradually for many years.

Since 1980 there has been liberalization in agricultural trade affecting vegetables, meats and dairy products. Rice was excluded from this shift in agricultural policy. Imports began to infiltrate the previously closed and regulated market resulting in lower costs to consumers and a lowering of profits to farmers. This situation continues up until the present.

In 1995, the World Trade Organization (WTO) included the liberalization of rice trade into their mandate. Rice was the last fort of Japanese agriculture

that was withstanding influences from other countries. The directive of the WTO will result in speeding up the decline in rice farming already underway in Japan. The price of rice on the international market is already well below the cost of rice in Japan. The result will be a further lowering of the value of Japanese rice.

Another problem concerning the agricultural industry in Japan is the aging of its work force. As farmers become older, and the trade in agricultural products continues to become less attractive, there is a shortage of successors to the industry as young people look for more lucrative pastures in business and big city life.

Between the years 1960-1992, there has been a drastic decline in the overall farmer population despite an increase in the general population. From a 1960 survey we find that 37% of the total population in Japan were professional farmers. By 1992 that population had decreased to 11% of which half were over the age of 60 (*Asahi Nenkan*, 1994).

Of all farmers in the 1960 survey, 34% were specialty farmers gaining all their income from agricultural products: 34% were farmers with a side job although their main income was still from farming; and 32% were farmers who procured their main source of income from a side job. By 1992, specialty farmers had decreased to 12%; farmers with a side job had decreased to 12%; and farmers whose main income came from a side job had jumped to 53%. The remaining 23% were small plot farmers who grew products primarily for their own consumption (*Asahi Nenkan*, 1994).

Agriculture in Shirataka.

Shirataka, with a population of 18,000 people, is mainly an agricultural town primarily growing rice. The town is situated in the Northern Tohoku district and is covered in snow throughout the winter. Summers are hot, between 25 to 35 degrees with a growing season extending from April-October. In a 1994 survey conducted by the town office, the farming population was noted at 36% of the total population. Of those people, 40% were specialty farmers; 10% were mainly farmers with a side job; and 50% were farmers who procured their main income from a side job.

Almost all the specialty farmers were forced to work away from home in the

off-season, mainly winters, in order to supplement their incomes and pay debts to the banks. Very few can garner a strong income from agricultural products necessitating this situation.

Future indicators all point to a further decrease in the population of farmers and a growing concern for the industry. The local government's plans for the area pin their hopes on a policy of "green tourism" to generate income so that visitors can experience the country life of the area and learn local customs and farming through home-stay programs and the like. Such plans are at present only on the table. The situation in Shirataka is symbolic of not only the older culture in Japan trying to preserve itself, but of the greater decline in farmers and farms occurring all over the country.

About the Shirataka Food Processing Farmers' Collective

In 1981 a group of ten like-minded farmers who shared a deep love of agriculture and the gifts that the earth brings to all started what is known as the "Shirataka Food Processing Farmers' Collective."

The concern of this group of ten specialty farmers was how not to get stuck into the situation where they too would have to work away from their homes in the winter to supplement their incomes. They decided that they were capable of growing enough vegetables to use the surplus to start a food processing plant, without compromising their basic production.

They started by making two kinds of pickles using eggplants and mixed vegetables. At the time when they were starting production, the local high school shut down its agricultural courses due to the students' lack of interest. Before then, the art of making Japanese pickles was a subject for study at the school. The students were taught skills on how to make the two kinds of pickles mentioned above. The recipe was recalled by two former students who had taken the course some years earlier and who were now members of the Shirataka Food Processing Research Group.

Distribution of the products was basically by direct visitations and mail. The most difficult problem was securing a market and increasing production to make the efforts pay off. Despite that hardships experiences early on, the group continued because of their love of farming and their dream of making use of their surplus products.

In 1987 after four years of renting a space from the local agricultural cooperative association for the pickle production, one of the members donated a building in which to expand their business. With the increase in space, and with an increased knowledge gained over the past years of trial and error, their product line increased to 10 kinds of pickles known as *tsukeimono*; 4 types of rice cake known as *mochi*; *miso* (a fermented rice and bean paste used in soups and sauces); *umeboshi* (a small pickled plum); and the dried fruits gathered locally (mainly *kaki*, or persimmon). They have also experimented with apple jam.

Still, despite the increase in products and production, the market continued to prove stubborn and profits remained in the red for some time. In 1989, a coordinated effort was made to look for markets and three accounts were opened with agricultural cooperatives near Yokohama, Chiba and Saitama, all near Tokyo.

After four years, the business finally got on the right track and all 11 members of the group were able to engage in regular work throughout the winter towards the production of Japanese pickles. The success has not come without difficulties and due to economic and policy problems, some members have left the group while new ones joined.

The group's basic policy since 1984:

1. All farmers are required to be specialty farmers only.
2. All farming is to be organic using no pesticides or chemical fertilizers (known as *Yuki-saibai*).
3. All business is to be directed to other cooperatives and small farming and consumer groups. Large-scale businesses and industries are to be shunned.
4. The group maintains a policy of exchange with all consumers and other farmers to teach about the group's methods.

All group members farm through three seasons: spring, summer and fall. The processing of vegetables and rice occurs during the winter months of November to March. Almost all members have joined various social movements of their own free will. Such movements include:

- People against "Tenno" or emperor system
- People against Atomic Power Generation

- People against the Destruction of Nature and Large-scale Logging
- People against the System which Systematically Decreases the Farming Area
- People against the Use of Synthetic Detergents
- People against the use of Helicopters used to disperse chemical pesticides
- People against the Discrimination of Handicapped People
- The creation of an All Asian Farming Network

Conclusion

The Shirataka Food Processing Farmers' Collective is an active and vibrant group of concerned and passionate citizens whose mandate is ultimately to protect the agriculture industry in Japan. Aside from their desire to keep agricultural imports to a minimum, the group is greatly concerned about the protection of the local and hence global environment. They are against the exploitation of developing nations and do not condone such practices by others.

The group believes that agriculture is the basis of life and industry and that without it, we would surely all perish. They are concerned that with recent declines in agriculture in Japan, and all over the world, the quality of life for all citizens is being compromised by careless government policies. There is great power in the hands of the farmer, to bring life to plants, to produce food for the world, and to share knowledge with all concerned citizens. In a small and humble community in Northern Japan, the Shirataka Food Processing Farmers' Collective seeks to accomplish just these purposes.

—THE OKITAMA WOMEN'S NETWORK (OWN)

HK-CHINA

Women's Cooperative Credit-Union in China: an alternative for empowerment

ALTERNATIVE TO WHAT?

Can a new form of collectivism based on mutual help, pooling of resources and the active participation of women emerge in the People's Republic of China, amidst a mainstream model of development that champions individualism and competition?

HOW THE WOMEN'S CREDIT UNION CAME INTO BEING

In early 1994, a pilot project on the formation of a women's cooperative credit union in a poor mountain village in Jiangxi Province was jointly launched by the Jiangxi Women's Federation (JWF) and the Hong Kong-based China Social Services and Development Research Centre (CSD). Although poverty alleviation is one objective, the project tries to avoid the conventional model of donor-beneficiary dependency, and aims at the credit union achieving sustainability in the medium term.

While CSD and JWF proposed the idea of the women's credit union and

selected the project site, the women from the two village-teams (i.e., two natural villages with a population of 290) invited to engage in this project were from the start encouraged to develop the project with their own initiative and momentum. Playing the role of facilitator, CSD and JWF paid home visits to every family, and helped convene several meetings to explain the way the women's credit union should be run. Subsequently, an inaugurating meeting was convened to form the credit union and elect by secret ballot a five-member Managing Committee. The election process was monitored by CSD and JWF. From the very start the accountability of the Managing Committee to the members was emphasized as well as the importance of the transparency of the day-to-day operation of the credit union.

ALTERNATIVE TRADE IN LILY BULBS

Instead of each member of the credit union contributing a share to make up the initial capital of the credit union, the Luxia-Wanli Women's Cooperative Credit Union (LWCU), named after the two village teams to which the members belonged, engaged in an alternative trade project with Green Empowerment (GE) to secure its initial capital. GE is a sister organization with CSD, also based in Hong Kong. While CSD engages in services for women and peasants in China and researches on development issues, GE aims to build a green consumers' network that trades in handicrafts or green food products from producers' cooperatives in China and other Asian countries.

Four tons of fresh, vacuum-packed lily bulbs, a traditional Chinese health food, were transported to Hong Kong in the summer of 1994. GE marketed the product by drawing in the help of volunteers—students, teachers, social workers, green groups. Within two months, this modest experimental project yielded a profit of RMB40,000 yuan (US$5,000). Insignificant as it might seem to an outsider, the profit was an important boost to the development of LWCU. Apart from each member receiving an average dividend of 160 yuan (US$20), which was not insignificant since the village's annual per capita net income was a mere 520 yuan (US$65), a collective fund of around 16,000 yuan (US$2,000) and an educational fund of around 12,000 yuan (US$1,500) were set up. Hence, the initial capital of the credit union was derived not from membership contribution, but from collective income-generating projects.

In the second year, the summer of 1995, alternative trade in fresh lily bulbs,

dried bulbs and dried lily powder was launched. With an expected profit of around 50,000 yuan (US$6,250) this year, members reviewed the way the profits were used in the previous year, and decided that 50% of the profits that year will go into the collective fund, instead of the 40% for 1994; individual dividends and the educational fund will each comprise 30% and 20% of the profits (instead of the 30% for educational funds in 1994).

VERGING BETWEEN COOPERATIVE AND CREDIT UNION

Memories of collective forms of production practised from the fifties to the seventies still draw suspicion from peasants when ideas of collectivism are thrashed out. On the other hand, not all peasants, especially those from regions remote from the south or the coastal areas, have benefited from the market reform introduced after 1978. Indeed, in Bai Shui (Pure Water) Township where LWCU is located, with a population of over 10,000, communication with the outside world relied on only one telephone line and one rugged mountain path which is not infrequently closed by landslides. The rising cost of transportation in the last decade has added obstacles for the people and their agricultural products to reach out. Under such circumstances, the pooling of resources is of advantage especially in terms of the purchase of seeds and fertilizers, and the sale of agricultural products. Cooperatives should help. Yet, since 1978, much agricultural production has been organized on an individual or household basis, and what is left of collective efforts has largely transformed into rural industries owned by private shareholders or the local government.

An alternative has to be explored which can meet both the actual production and distribution needs of peasants and overcome the sociocultural hostilities or reservations towards collective forms of organization. The central government, in the early nineties, issued several circulars urging democratization at village levels in order to promote peasant initiatives in bettering economic and social livelihood. While county and township level cadres are appointed by senior levels, village chiefs and village councils are supposed to be formed through free election by villagers. However, it is difficult to tell how individual villages implement these directives from the central government, and more often than not, nominations come from higher up.

Before LWCU was formed, women from the 65 families in the two village

teams seldom communicated with each other except at weddings, funerals or during the new year. Each household worked on its own piece of contracted land and there was no collective project. Villagers might still occasionally be called upon by the township authorities to contribute some days of voluntary labour towards planting trees or improving the irrigation system, but most of the time, each family attended to its own affairs.

LWCU was formed hand in hand with the lily bulb alternative trade project, so in a sense, LWCU was born from a cooperative project and acquired its initial capital from this and other cooperative projects. Members saving money or taking credits from LWCU were not prominent in the first year. Only a few members successfully obtained credits in very modest sums. According to the Managing Committee, fear of members not repaying the loans caused them to be very cautious in credit giving. In 1995, of the 6,000 yuan (US$750) set aside for members to apply for credits, 5,300 yuan (US$660) stayed in the bank account.

Instead, LWCU rapidly moved into more cooperative projects after September 1994 when it had at its disposal a collective fund. It has renovated the common ancestral compound belonging to the two village teams, in which it has rented two rooms for operating the newly bought electric grinder and thresher, one room turned into a classroom with desks and benches for evening literacy and agricultural skills classes to be conducted for members, and one other room also with desks and benches as a kindergarten for kids aged four to six from the two village teams and nearby village teams. It has contracted four acres of hill-land on which to grow mandarins and beans. It has built a new bamboo pipeline to channel spring water to the village. It has subscribed to a women's newspaper. And it has established a special fund for aiding poverty-stricken households in the two village teams.

These projects are community-based, covering different aspects of the women's everyday life. Hence, while carrying the name of a credit union, LWCU is more than a credit union and it avoids treading the same path of failure that many government-initiated credit unions have bogged down on. Jiangxi Province is well known for its government-sponsored rural credit unions which started in the early 1980s with some government capital input. The key problem encountered by many of these credit unions whose function is mainly credit management is the question of solvency since many loans cannot be repaid. Hence there is a growing tendency not to lend to poor households. The rural credit union in the village where LWCU is located had been dormant for some years when LWCU was set up.

WOMEN'S WAY OF ORGANIZING

While 80% of the men interviewed by CSD and JWF knew the existence of the village credit union sponsored by the government, none of the women interviewed was aware of its existence or its credit-giving function. Some women remarked that this was men's business. It is rural practice that men, being master of the household, attend village meetings and take part in "public" activities.

When the idea of an all-women credit union was explained to them, many women found the idea entertaining. The inaugurating meeting was well attended by about 50 women. After a plenary session, the women broke into three groups to discuss the constitution of the credit union and nominate Managing Committee members. One issue was rather controversial. Should membership be based on individuals or on households? Women's identity with the family has always been strong especially in the rural context. A woman is often referred to not by her name but as someone's daughter, daughter-in-law, wife or mother. It was finally resolved, with majority agreement, that LWCU should recruit women as individual and not families for membership. The women were aware that this was a rather innovative practice and would be to the advantage of families with more women when it came to sharing dividends. Some joked that women had seldom been so welcomed and valued in the rural family.

The inaugurating meeting also resolved that all women aged 16 or above would be eligible for membership by paying an annual membership fee of one yuan (US 12 cents). Several women could not afford it at the time, but got an immediate loan from some other members. When it came to nomination and election of the Managing Committee, the discussion was keen, and the following qualifications were spelt out: Committee members should be persons of integrity, and should not put the money into their own pockets; they should be educated (meaning they should have finished junior high school or primary school) and know how to read, write and do the accounts; they should be easily accessible; they should be willing to take up extra work without remuneration; they should let members know what they were doing and should not be secretive; they should do the work and not just do the talking. After expectations of the Committee members were voiced, nominations were taken and then members went up to a voting corner to tell JWF staff what their preferences were. Some women said it was the first time they had ever cast a vote.

The women's credit union was born with voluntarism and goodwill, though

not without doubts of its feasibility. As soon as it was formed, members were called upon to work on the alternative trade project. The women concreted and renovated the village primary school building for the packaging of the lily bulbs (the harvest time happened to be summer vacation for school children). They also organized themselves for the work of purchasing lily bulbs from members, washing and packaging them, all done within five days. Most members came to work, though a few stayed away, skeptical lest their labour would be unrewarded. Very few men turned up to help in the project, but the women said some men were invisible though they were either working on the land or were doing the laundry, cooking and caring for the children at home in order that these women could work in the primary school building.

The Managing Committee and the members had had a long discussion before they decided on how dividends should be distributed when the profits from the lily bulb trade came back. The formula they came up with was interestingly a mixture of egalitarianism and "to each according to her labour contribution". Fifty percent of the sum was divided equally among all members of the credit union; 30% was divided equally among all those who had worked for the lily bulb project; the remaining 20% was divided according to the number of working days the members had contributed to the project. Members selling lily bulbs to the Credit Union did not get any extra share of the dividends, because it was considered that they had already got the money from selling lily bulbs to the credit union at 10% higher than the market price, and in addition, not all members had grown lily bulbs (poorer households usually could not afford the expensive seeds). Hence, those who refused to work for the project received only half as much as some others. Those who contributed more labour in terms of working days received slightly more. Those who had not joined the credit union got nothing.

When it was visible that membership of LWCU brought benefits, all women eligible for membership joined the credit union. The membership rose to 94 from the original 75. In the summer of 1995, all members eligible for labour (government definition of productive labour is those aged 18-55) eagerly worked for the lily bulb project, and some members complained of inadequate jobs assigned to them. The nature of complaints this time was quite different from the previous year.

The way the credit union recruits members to work in its different projects varies according to the nature of the work. In the managing of the orchard,

form era has been framed by a development model which stresses immediate or short-term accomplishments (success valued in money terms) and the exploitation of resources by a minority justified by the rhetoric of postponed overflowing of benefits to the margin. This logic of thinking, as a reaction to pre-1978 forced collectivism and the rhetoric of communist egalitarianism, has its hegemonic influence even among marginalized or disadvantaged sectors.

LWCU was faced with a splitting controversy six months after its formation. The issue was how the collective fund from the profit of the lily bulb project should be utilized. While the majority agreed on purchasing an electric grinder and thresher which would not yield much profit but would alleviate the workload of the women and facilitate their agricultural production and sideline activities, a minority insisted on buying a machine that makes charcoal as household fuel. The idea was to bring coal from outside for processing and creating products which would be primarily exported to urban areas for sale. The total collective fund from the credit union would constitute about 40% of the cost of the machine, and it was proposed that contributions be acquired from LWCU members in the form of shares to purchase the machine which could then be "contracted" to one or two families to operate. The profits could then be divided among shareholders, LWCU being one of them. Prompted by several men who had already planned to buy a van to transport the coal, some six members of the credit union tried various means to overturn the majority decision and eventually even split the collective fund into two parts according to the numbers in support of the two different options. LWCU was paralysed for some time until the minority caucus eventually gave up and returned its "share" of the collective fund to LWCU.

This incident should not be understood as incidental, or as a conspiracy by some "bad guys" to sabotage the solidarity of the credit union. It should be noted that when the two—either the grinder and thresher, or the coal machine—were put to a vote, one-third of the membership opted for the coal business, hoping it could yield quick profits despite the inevitable pollution and the prospect that the gains would go to a small minority of big shareholders. Even after the grinder and thresher were purchased, the idea of "contracting" out the machines was for some time toyed with. Eventually, however, after much discussion, a way thought to be fair to everyone was arrived at.

The second problem has to do with the internal operation of the credit union. A key to success is the fostering of a sense of belonging to LWCU so that it will

not be seen as simply instrumental in income-generating or credit-giving, but above all else, it is itself building up a community attending to the various needs of the members and giving support in the spirit of sisterhood and solidarity. If members are to see LWCU as "their own" organization and identify with it, they must have faith that it will be to their interest, particularly in the long term, that LWCU develops and that each member is committed to its development. In a context where rejection of long years of reluctant contribution to the "collective" has been fueled by an aggressive, masculine ideology of enriching oneself at all costs, the mistrust and suspicion among people take time to dissipate, and faith and hope in a spontaneous, new collective take time to nurture. This empowering process is also met with another difficulty. While leadership is crucial in dreaming of alternatives, formulating proposals, organizing discussions, seeking majority agreement and actually implementing the projects, internal hierarchy has to be consciously avoided so as not to dampen the initiatives and enthusiasm of the members. This is a problem that any organization anywhere has to grapple with, but in the Chinese rural context with entrenched patriarchal values and practices, an all-women organization is not automatically immune from such dynamics although it has the potential for resisting such values and practices, as LWCU has well demonstrated in its effort to tolerate differences and come up with agreements through long, sometimes painful, processes of negotiation among the members. It will still have to go through an arduous process of mobilising and motivating members to contribute to and benefit from the common good, containing commandeering directives from the leadership, and resisting men who are always eager to advise or criticize.

REACHING IN AND BORDER-CROSSING

The women in the credit union can make do with limited resources. LWCU has contracted a piece of hill-land for growing mandarin trees. The former contractor did not renew the contract because it was difficult to prevent village's many kids from picking and pilfering the fruit. LWCU came in and contracted the piece of land for ten years. One of its resolutions was that all members be obliged to educate their own kids and teach them to help guard the fruit of the mandarin trees instead of picking them. This year, due to heavy rains, there was not much left for harvesting, and what survived the bad weather in the end

could not escape the plunder by kids. All members with kids who pilfered the fruit were fined. How the credit union is to deal with this matter has become rather delicate. It will be a test of its management capabilities which cannot succeed without the full support of all its member families.

LWCU started a literacy class for its members in May 1995. About a third of its members attended evening classes nine times a month, from 9 p.m. to 11 p.m.. Most of them are in their thirties and forties. The eldest student is aged 64. It was reported that her husband thought it was a good bargain that his wife could study without having to pay any fees. The woman was illiterate. When asked why she should want to learn at such an old age, she said she never had a chance to learn how to read and write, and now, with every word learnt, she would know one more word. Many other students want to learn to do arithmetic and write invoices, memos and IOU notes. In the winter with the chill and the frequent black-outs, the evening classes were suspended.

The kindergarten idea was put forward in July 1995. Young mothers would like their kids to be taken care of and taught some basics before they are sent to primary school. Only about half the villages have kindergartens, and where LWCU is located, there is no kindergarten. Starting from September 1995, LWCU runs its own kindergarten so that mothers can also be freed for the day without having to worry about their kids' safety. The teacher also takes up the responsibility of looking after the small library that LWCU has set up.

In April 1995, CSD and LWCU, with the assistance of the Ministry of Health of Jiangxi Province, jointly carried out gynaecological examination and medication for LWCU members. It was found that 70% of the women suffered from various gynaecological diseases.

Invisible changes are also being brought in. The gender relationship in the family has also been changing. Before the credit union was formed, the women minded their own business and had very little chance of coming together. After the credit union was formed, there were more opportunities to work with each other on various projects. Chatting and discussing family affairs has resulted in one instance of the women mounting enough pressure on a wife-beater to stop his scandalous deeds.

The different projects involve important areas of improvement of the general quality of the women's lives. More importantly, these projects have come about because the women are imaginative and innovative. The formation of the credit union was in the first place a serious challenge for these women.

Taking matters into their own hands, resisting the dictates of the men, planning projects with minimal resources, persuading others to take an interest and to place common concerns as the priority, learning to overcome one's own limits, and struggling to accommodate different viewpoints and positions. This whole process has been educative and empowering for the women, in particular some of those in the Managing Committee. A space has been created by the women in which initiatives to tackle problems affecting the women's daily lives can be pursued, resorting to local knowledge and local resources. A lot of tears have been shed in the face of frustrations, but many women still think it a valuable experience. This process of economic empowerment and community building is at the same time a process for a better understanding of the relations between gender and social power, and for the women to locate the possible and tap their own potentials.

Concerning the use of the grinder and thresher as well as enrolment in the kindergarten, LWCU has generously invited women from nearby village teams to take advantage of the facilities. LWCU is in general seen as a positive experience in the vicinity, and requests from other village teams have been voiced, asking for assistance in their formation of women's credit unions.

REACHING OUT AND NETWORKING

LWCU has been introduced by CSD-translated literature to experiences of women's income-generating projects and health programs in other Asian countries. The banana alternative trade between farmers in Negros, Philippines and Japanese women's consumer networks and the subsequent community development projects were also used as examples when LWCU developed its lily bulb trade project with Green Empowerment in Hong Kong. The need for linkages is more urgently felt when local initiatives are confronted by forces emanating from centres remote from their locality. The patriarchal modernization process effecting a whole complex range of power relations found in North-South, state-civil society, capital-labour, scientific technology-indigenous knowledge, urban-rural, men-women has to be understood and the effects made visible before steps to reverse the unequal relationships of dominance and dependence can be taken. LWCU therefore has to reach out to learn from other people-centered experiences and seek solidarity support.

The people-to-people alternative trade in lily bulbs is a first step. Not only does it provide a small market for the lily bulbs and ensure some income for the women, it also raises a series of issues on ecological concerns and urban-rural partnership. For example, with the lily bulbs being traded as a green product, quality control uncovers a basket of problems relating to soil degradation, water pollution, changes in farming patterns and general lack of research in agriculture to support the farmers. The pricing of the products also highlights the state of reduced bargaining power on the part of the peasants in recent years due to soaring transportation costs. Whereas in the eighties, clusters of households would jointly send someone to sell dried lily bulbs to merchants in Guangzhou and get a better price, now they cannot afford the transportation costs and can only wait for merchants to come for their products which they have to sell at a low price. The urban-rural scissors difference has accelerated in the past years. The mushrooming of rural industries has provided more jobs and home-based work for peasants, but giving up all their leisure time and earning more money has not resulted in significant improvements in livelihood. Many families are still struggling hard for survival. Such deterioration of the quality of life on a general scale is a fact of life in the Chinese countryside. People have to work harder and harder to maintain their living standards. The impoverization of the countryside with women's positions further relegated to the fringes is one of the impacts of global economic restructuring; this is a common phenomenon shared by many other Asian, Latin American and African countries. Networking with other women's groups assists the exchange of insights, the sharing of people's responses, and the search for new alternatives. Transborder linkages to build an alliance of hope of empowered people and to evolve a common vision have been underway, and LWCU can both profit from and contribute to this process.

INPUT FROM CSD AND GREEN EMPOWERMENT

CSD, as a group of social workers, lecturers and researchers based in Hong Kong, plays the role of initiating projects, conducting research, monitoring progress, and facilitating exchanges between groups from China and from outside. It helped organize an exposure trip for the Committee for Asian Women in 1994. It sponsored and lectured for a training course for 130 women cadres

of JWF on social research concepts and methodology in September 1994. It conducted a joint research with the Ministry of Health of Jiangxi Province on gynecological diseases of LWCU members in April 1995. It translates and compiles articles on the experience of Asian women in community and health projects. It provides loans to LWCU on community development and educational projects. It alsos facilitates dialogues between JWF, LWCU and groups from outside China. CSD is reviewing the experience of LWCU together with JWF with a view to promoting similar projects of all-women credit unions in Jiangxi Province. CSD is also part of the alliance-building effort in the spirit of the People's Plan for the 21st Century.

Green Empowerment, as a sister organization of CSD, is engaged in the actual business of alternative trade. It is currently actively building a green consumers' network in Hong Kong which also seeks to link up with producers' networks and consumers' networks in other parts of Asia. It also engages in research on alternative trade practices and possibilities. The fostering of a rural-urban partnership based on equality and respect is one of its preoccupying concerns.

—LAU KIN CHI

and consumers and would foster a spirit of living together; and 4) direct exchange between people should be possible.

Two other important factors preceding the build-up of an alternative trade business are: the public concern over the dangers of agricultural chemicals, citizens' groups concern with problems in the Philippines—the Japan Committee for Negros Campaign (JCNC) which was inaugurated in 1986.

JAPAN COMMITTEE FOR NEGROS CAMPAIGN

The immediate predecessor of ATJ was the JCNC, which began importing *mascobado* sugar from Negros as part of its activities in 1987 jointly with citizens' groups in Japan, such as the Association for the Betterment of Tokushima, Chubu Recycling Citizens' Group and Kyoseisha Coop (later becoming the Green Coop Union).

JCNC was initiated in February 1986 by church organizations and citizens' groups which had been conducting various citizens' groups exchanges with the Philippines. The year before that it was revealed that in Negros, a well-known sugar-producing island in the Philippines, people had been suffering serious hunger due to high unemployment of sugar plantation workers. According to the figure published by UNICEF in September 1985, about 150,000 people were starving and 40 percent of about 260,000 square kilometers of sugar cane fields were idle. In response to calls from Philippine citizens' groups, JCNC began an active fund-raising campaign in Japan to provide emergency assistance.

While promoting the emergency food and medicine campaign, the need for a long-term program was discussed with a local people's organization connected to the Negros campaign.

The discussion led to the creation of the Rehabilitation Project: a project to support plantation workers to grow their rice and vegetables on fields idled by landlords due to the fall of sugar prices. It was a response to the request of various people, such as the National Federation of Sugar Workers and Basic Christian Community, which had been working for many years with the people who had been forced to work for cheap wages and with inhumane conditions under the large-scale land ownership system.

With an understanding that it was neither chemical fertilizers nor expensive farm machines that poor people needed to begin farming, JCNC began a cam-

paign to give them *carabaos* (water buffaloes). Also it raised funds to construct an agricultural training center to develop farming skills among sugar workers. The fund JCNC raised during the period between 1986 and 1989 amounted to about ¥180 million.

NEED FOR OUR OWN DISTRIBUTION CHANNEL

What came out of a series of these joint activities between people of Japan and Negros is the trade of *mascobado* sugar. The idea was that the profits earned through the grassroots trade outside of the existing commercial route could be used to develop people's economic independence.

JCNC's activities emerged from the emergency call to fight hunger. From the beginning JCNC tried to appeal to people that the hunger was caused by social factors, like poverty and unemployment. First of all, emergency assistance is needed. However, it cannot be sustained for long. In order for the people to achieve a minimum level of survival, they need to cultivate land to produce food. Furthermore, to recover from chronic malnutrition, improve economic conditions, and to provide education for children, a program of "economic development" was needed.

The sugar workers, however, are not farmers but "workers." Their work consists of simple labor such as planting and harvesting sugar cane and weeding. This appears to be farm work, but has actually been reduced to line work as in a modern factory. The land in front of them does not belong to them. They don't own the farm tools they use nor houses they live in. They don't have any savings.

They were generally born into the small world of the sugar plantation, accepting what the landlord told them was their fate.

When a plantation worker wanted to buy a necessary article with little cash income, for example, he must buy from the more expensive store run by his landlord. Middlemen monopolized the means of transportation, so they could dictate the price of the products that the peasants harvest. Even if peasants were able to emerge from the threat of hunger to simple survival, they were still trapped in circumstances that prevented them from bettering their lot. Even if able to harvest enough farm products to sell, the profits would be sucked off by the landlord or middlemen unless they had their own distribution system.

A people's organization in Negros established Alter Trade Corporation, a

company aiming at realizing their own distribution system, by citizens and for citizens. They chose *mascobado* sugar, a traditional brown sugar produced before the American capital built large sugar refineries in Negros in the early 20th century. Directing their attention to this product which small landowners occasionally grow, and with cooperation from JCNC, they achieved sales distribution in Japan through livelihood coops and other consumer outlets.

A part of the profits earned from the export of *mascobado* sugar was set aside to improve production facilities and buy trucks and other means of transportation. In this process they received good advice from livelihood cooperatives in Japan. While sugar workers learned agricultural techniques at the Agricultural Training Center, people in Negros learned how to manage a distribution system by themselves through actually practising people's trade.

This process is considered the first step toward broadening the island economy away from complete dependence on a single crop, sugar, to the inclusion of agricultural production. Now 100 tons of *mascobado* sugar are imported to Japan annually. Following Japan citizens' organizations, groups in Europe have begun importing the sugar, now as much as 400 tons a year.

SIGNIFICANCE OF BANANA IMPORTS

The bananas we import from Negros are a species called *Balangon*. All the bananas in Negros except for their own consumption, had been distributed in a system from which only middlemen could get profit, and sold on the local market.

About 15,000 people out of the total population of 23,000 in the La Granja district, La Carlota City in Negros Occidental are organized in the Basic Christian Community. In the mountainous area of this district there is an area where *Balangon* bananas grow naturally. About 1,000 households are the producers of this banana. The members of the Balangon Growers' Association (BGA) harvest and transport them to the packing center where it is washed and packed by the members of Basic Christian Community. Most of the members were unemployed. Few worked at nearby plantations. Thanks to the direct sale of bananas to Japan, many people now have a stable income. An adequate price is paid directly to the producers.

Unlike the *mascobado* sugar, bananas are a fresh produce. A number of problems confront importers and exporters alike. According to the Japanese Quar-

antine Act, the banana must be unripe when it enters Japan in order to avoid insects causing damage. Bananas release ethylene gas as they ripen. If some of the bananas begin to ripen while on transit to Japan, immediately other bananas turn yellow. To avoid this it is necessary to transport the bananas to Manila within 36 hours after they are picked, where refrigerating facilities maintain its temperature at 15 degree C. This calls for an extremely systematic operation involving a number of people.

It was the strong unity of the Basic Christian Community that allowed us to accomplish that operation. The people working there participated in the process of deciding on the work procedure, which was discussed until everyone was convinced, and then shared the work. The principle that everyone is a participant thoroughly works here.

The *balangon*, which has a distinct taste, is not only sweet but is also a bit sour. It is very popular among the Japanese. But for the Japanese who have access to this banana, it has more value than mere taste and nutrition. A special association with the people of Negros is being realized, and this process is anything but automatic. There was a time when the members of Green Coop, who were looking forward to the arrival of the bananas they had ordered received news that the truck transporting the picked bananas had been stopped by the military and denied further export. Coop members, thus, learned of a new reality in the Philippines: under the Aquino government militarization had intensified and human rights are violated.

The taste and quality of the first batch of bananas we imported were a bit disappointing. Since then the quality has gradually improved. The banana import was an attempt which became possible only with the support and understanding of the livelihood cooperative whose members not only understand the Third World problems but also have various experiences in the peace movement in addition to the consumer movement.

THE ROLE OF ALTER TRADE

Through the import of *balangon* bananas and *mascobado* sugar, ATJ is allowing many Japanese people to see their lifestyle differently and work toward a different relationship with the Third World. There is, however, a danger in a highly industrialized consuming society like Japan that an "expensive" banana

becomes merely a novel commodity. In order to avoid this danger it is necessary that the work to produce a commodity is not an individual activity but part of a local movement/organization. With this as a premise the problem of financial and/or technical cooperation emerges.

The members of Green Coop Union, whose operating slogan is to protect "life, livelihood and nature," have noted that through exchanges with people of Negros they have found that their slogan could not be realized by merely thinking within Japan. The cycle seems to have caught on them: for the bananas in Negros to become a commodity, it was necessary that consumers in Japan who were organized be made aware of their social role; and the process of alternative trading itself is building consciousness.

Whether Alter Trade can make its ideal into a reality depends on how far the two movements, the spontaneous Japanese consumers' movement for change, in the form of economic activities, i.e. trade, and the trend of citizen's movements in the Third World, can be connected.

JAPANESE LEARNING FROM THE THIRD WORLD

At the founding of JCNC some people were concerned that if the project was unsuccessful, it might only give the Japanese an image that the Philippines and its people were weak, needing help. They worried that it might serve to avert people's attention from the responsibilities of Japan and other advanced countries in perpetuating the social problems in the Philippines.

Japan, at present, is the largest provider of ODA (official development aid) in the world in terms of money. The Japanese public has begun recently to become aware of the problems caused by ODA, although still now, it keeps the view that "Japan should contribute to the world with assistance rather than increase military budget."

The growth of ODA is well known but not the kind of assistance that has been given to other countries nor its effects.

To overcome the two oil crises, Japanese capitalism smartly transferred the industries to Southeast Asian countries: the industries whose labor cost was high, or polluting industries which would cost much to install environmental conservation equipment to appease rising anti-pollution movement at home. In the Philippines, under the martial law imposed by ex-president Marcos, and

with Japanese aid as a start, Japanese companies moved into the country. Some progressive people in the Philippines regarded the Japanese aid as camouflaged aggression.

However, a chance for Japanese people to hear such a voice of the Asian people was extremely limited. Maejima Munetoshi, the JCNC representative, expressed such a relationship between the Philippines and Japan as: "It is not Asia that is needing Japan, but Japan that needs Asia." To have a real exchange and understanding between the citizens of two countries is easier said than done.

We may say that the JCNC's attempt of people's trade conducted by Alter Trade and Japanese coops, including Green Coop Union, has played a certain role for mutual understanding of the people in the Philippines and Japan. The people who have participated in it now have a grand idea of creating an alternative system which can begin to reverse the present world economic system of exploitation and repression as seen in the present North-South problem. Naturally, the task has just begun. We must further develop our worldwide network, overcoming many obstacles.

Main Association Cooperatives: GREEN COOP UNION, SEIKATSU CLUB CONSUMERS' COOPERATIVE UNION, SHUTOKEN COOP CONSUMERS' COOPERATIVE UNION, KAN NETWORK CO., LTD. *(Radish Boya)*

INDIA

Kalliassery Experiment in Local Level Planning

This presentation is about an experiment in local level planning. It was conducted by Kerala Sastra Sahitya Parishad (KSSP) in a village panchayat, Kalliassery.

Kalliassery is in Kannur district in northern Kerala. The activities of Kalliassery started in 1991 as a part of the Panchayat Resource Mapping (PRM) programme along with 24 panchayats in Kerala. Although the primary objective of the programme was to formulate a model for local level planning, it has already given prominent contribution in the Concept of Democracy in practice.

Capacity to govern is a vital aspect of democracy. To gain this capability, people should be prepared intellectually and mentally. It is at this juncture that PRM plays a vital role. The very essence of PRM is the process of Education of Volunteers involved in mapping as well as the public. The whole community is involved in mapping one way or another.

Following are the important aspects of the process:

- Mapping by local volunteers.
- Wide people's participation.
- Self-education for volunteers and the public.
- Map literacy and resource literacy.
- Capability to identify problems in a better way.

On the basis of Resource Maps we could analyse our local resources and identify our development programmes. We tried to formulate developing plans with the help of a wide database provided by the maps. For this, we had to conduct so many quick surveys and studies further. Examples:

- Socio Economic Survey
- Demand Survey
- Institution Survey
- Drainage Survey
- Energy Survey
- Powerline Mapping
- Health Survey, etc.

On the basis of these, our volunteers prepared sector-wise analysis reports which gave strong platform for development suggestions. We discussed these suggestions with different officials and experts and try to prepare a Comprehensive Action Programme (CAP).

This was discussed with people at various levels and by 1993 we started implementation.

Following are the important programmes implemented:

- Panchayat School Complex
- Vegetable Cultivation Programme
- Canal Maintenance
- Construction of Canals
- Construction of Roads
- Health Programmes
- Installation of Improved Chulhas, etc.

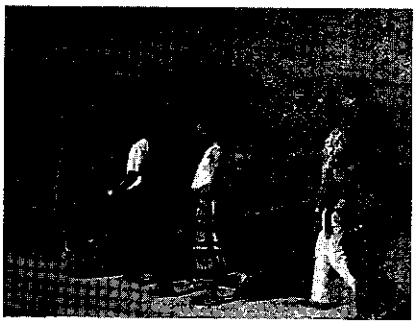
When we started implementation, we felt a need for a new network and as a result we organized a Panchayat Development Society (PDS) comprising of one representative from a group of 25 households. This is headed and controlled by the elected panchayats.

In the vicinity of the 73rd Constitutional Amendment and new Panchayati Raj Act, the PDS can play a vital role. It has given the people direct contact with the local government and they have become participants in decision making

and implementation process. The neighbourhood has become a vital community unit.

We envisage to invert the present power structure by establishing supremacy of panchayats in all respects, including finance.

EXPOSURE TRIP PAPERS



March through the Village of Mundur and exposure trip at Hydel Generation site.

An Action Plan for Participatory Micro Hydel Generation in Kerala

1. INTRODUCTION

Hydro as a clean, renewable and truly inexhaustible energy source available in nature has assumed profound significance with reference to greenhouse global warming, a possible rise in sea levels threatening to submerge low-lying islands, ozone layer depletion, acid rains, etc.[1] Given the myriad of economic and environmental problems facing nuclear power, hydropower's lead seems to widen in the years ahead.

The growing chorus of protests from environmentalists against big dams have resulted in a critical evaluation of their impact. Many of the ecological changes accompanying big dam projects are site-specific and the impacts can be minimized to some extent by a comprehensive plan sensitive to the local ecology. However, in practice, ecological monitoring is neglected and a dam is often perceived only as a civil engineering and industrial development project. The high capital cost of transmission and recurring transmission losses of most promising large hydro sites located far from load centres is another matter of concern. Small hydro plants, which avoid many of the social and environmental problems associated with large dams, have evolved as a definite and amenable alternative to big dams.

The perennial streams in Kerala with its undulating terrain are ideal for micro hydro development. Whenever perennial streams are not available reservoir-based small/mini hydro can also be thought of. In spite of the precarious power position of Kerala it is surprising that Kerala is still not exploiting its fairly good micro/mini hydro potential.

2. CURRENT SCENE

The first effort in developing micro and mini hydel potential in the state was organised by the State Committee on Science, Technology and Environment (STEC) in 1983. STEC sponsored a project under the Western Ghat-co-ordinated research programme for a feasibility study of micro and mini hydro projects in Kerala in 1983. Fifty-seven suitable sites have been identified by the project team[2] for small hydro development.

The Kerala State Electricity Board (KSEB) during the early nineties undertook an investigation of mini, micro and small potential. One hundred eight suitable sites have been identified. The KSEB study lists 172 sites including the sites investigated under the Joint UNDP/World Bank Energy Sector Management Programme (ESMAP) in 1990 and the sites investigated under the STEC programme (See Table 1.)

However, the KSEB has not made any effort, based on the above pre-investigations, to formulate a strategy for a time-bound implementation of micro and mini hydel in the state, and decided to implement only a few small hydro projects of its own, mostly dam and other irrigation-based sites. A preliminary investigation and documentation of the existing and proposed schemes indicate three important shortcomings. First, the schemes have been conceived, designed and executed as scaled-down versions of large conventional hydro installations. Consequently, there are numerous redundancies in the designs for key features such as the layout of civil works, the facilities incorporated into the power house structures, the selection of turbine-generator equipment, and the specification of electrical switching and protection systems. Second, due to the use of relatively complex layouts for the schemes and poor project management, the gestation time to construct and commission the schemes has been unacceptably high (See Table 2). As a result of the slow pace of implementing the construction work, there has been a significant escalation in capital costs and in interest payments during construction. Third, the viability of these schemes are being undermined by the use of unnecessarily large numbers of technical staff to operate and maintain the mini hydro schemes.

Only two projects in the micro mini range have been attempted so far in Kerala, viz. Pookkot and Sugandagiri, both by the Agency for Non-conventional Energy and Rural Technology (ANERT) in Wayanad. The specific costs of these projects are high as could be seen from Table 3, 4 (The big hydel and small hydel projects

from Karnataka are shown only for comparison's sake). As in the case of the KSEB projects, here also conventional methods of construction were employed and no serious effort was put in for cost reduction. The unit cost of energy have reached staggering proportions because of extremely low plant load factors (around 5%).

3. AN ACTION PLAN FOR KERALA

A review of the experience elsewhere in India also indicate that high specific cost and low load factor and little or no peaking capacity are the major shortcomings of small hydro projects. For these reasons the strategy of small hydro development in the country had been on the following lines:

(1) Selecting sites at remote areas where the grid cannot extend.
(2) Reduce cost by cutting down site survey, safety requirements and redundancies.
(3) Promote investment in the private sector.
(4) Opt for single systems operating at the highest possible head.

Whereas each of the above approaches are valid on their own to a certain extent, none of them would cater to launching of a massive small hydro programme to tap the 5000 MW potential estimated.

A massive programme for small hydel can succeed only if the grassroots and other appropriate levels are involved in its planning and implementation. Conventional planning approach of optimising only energy costs and energy losses in transmission cannot apply in small hydro development. In fact, a small hydro has to be a central point of development of a village by catering to optimum utilisation of the available water resources for domestic, agricultural, industrial requirements and power generation. An integrated approach for increasing the economic security of the neighbouring community as a whole by a holistic multi-pronged programme of overall development of the project site leading to multiplier effects in the local economy has to be evolved[3]. This is possible only by involving the local community in the planning as well as implementation of the programme.

Along with the multi-objective planning indicated above attempts should also be made for standardisation . Since the scale of operation of mini hydro prospects is small relative to the size of big hydro stations, it is not at all cost

effective to develop off designs. Further, the type and performance of turbines of mini hydro applications vary significantly from manufacturer to manufacturer; some degree of flexibility is required at this stage of design, so that it would be possible to consider alternative configurations of turbines that would satisfy minimum performance specifications. A procedure of standardisation is indicated as a flow chart in figure 2[4].

Mini-Micro equipment manufacturing capability is already available in the country, even though there is a lot of potential for significant improvements in efficiency. If a major programme of SHP is undertaken BHEL and other major equipment manufacturers can be approached and significant reduction in cost of equipment for bulk orders can be obtained.

It would be also desirable to establish suitable institutional arrangements for implementation of small hydro in the state. This should include:

(1) Setting up a separate autonomous corporation which should formulate a scientific plan for cost reduction of small hydro in the state along the above lines.
(2) Involvement of local bodies in the planning, implementation and operation of small hydro programmes.

—RESY GEO

END NOTES:

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TABLE 1. INVESTIGATIONS ON SMALL HYDEL IN KERALA

RIVER BASIN	STEC STUDY			KSEB STUDY			ESMAP STUDY		
	Micro	*Mini*	*Small*	*Micro*	*Mini*	*Small*	*Micro*	*Mini*	*Small*
Peruvemba	1								
Valapattanam						1			
Kabini									
(Mananthavady)		1			4				
Karamanthode					3				
Kuttiyadi		2			3	6	3		
Chaliyar		5			9	12			
Chalakudy			3			9			
Periyar	2	5	12	5	18	18			
Pamba						12	1		
Bharathapuzha	3	5	2		3	1	1		
Muvattupuzha		1				2			
Neyyar		3							
Vamanapuram		4	2						
Karamana		1							
Kallada		2	1						
Chandragiri		2							
Mahe						1			
Karuvannur						1	2		
Total	6	31	20	5	40	63	7		

TABLE 2. STATUS OF IMPLEMENTATION OF SMALL HYDRO

Name of the project	*Original target of completion*	*Present target*	*Original estimate (Rupees in lakhs)*	*Revised estimate (Rupees in lakhs)*
Malampuzha	1988-1989	1995-96	295	425
Mattupetti	1988-89	1995-96	292	435
Peppara	1988-89	1995-96	393	580
Chimmini	1988-89	1995-96	314	425
Malankara	1988-89	1995-96	780	1600

TABLE 3UNIT COST OF POWER—DISCOUNTED CASH FLOW METHOD
(Rs./.KW)

InterestRate(%)	5	10	12	15	20
Excluding T&D cost					
1. Varahi Big Hydel, Karnataka	21456.00	41567.00	54471.00	81803.00	160660.00
2. Mallapur Small Hydel Karnataka	19364.00	25592.00	28711.00	34130.00	45391.00
3. Sugandhagiri Micro Hydel Kerala	105820.00	96601.00	93830.00	90255.00	85323.00
4. Pookkot Micro Hydel, Kerala	90867.00	82950.00	80570.00	77500.00	73265.00
Including T&D cost					
1. Varahi Big Hydel, Kerala	37425.00	67486.00	86179.00	124740.00	231330.00

TABLE 4. UNIT COST OF ENERGY—DISCOUNTED CASH FLOW METHOD
(Rs./.KW)

Interest Rate (%)	5	10	12	15	20
Excluding T&D cost					
1. Varahi Big Hydel, Karnataka	0.27	0.82	1.24	2.27	5.82
2. Mallapur Small Hydel, Karnataka	0.25	0.51	0.66	0.96	1.66
3. Sugandhagiri Micro Hydel Kerala	17.49	24.79	27.87	32.53	40.18
4. Pookkot Micro Hydel, Kerala	15.02	21.29	23.93	27.93	34.50
Including T&D cost					
1. Varahi Big Hydel, Kerala	0.48	1.33	1.97	3.46	8.38

Improved Woodburning Cookstoves, Signs of Success—A Case Study of Parishad Chulhas *

INTRODUCTION

Fourteen percent of the world's energy equivalent to 126.9 crore tonnes of oil is derived from biomass energy[1]. Three-quarters of the world's population, i.e., those who live in developing countries depend on bioenergy as the source of primary energy and often as the sole source of inanimate energy[2]. Most of these people live in small rural communities spread around the three continents. In many of these areas fuelwood is seldom bought and sold. With the extensive and virtually unhindered deforestation, more time and effort is needed to gather wood and this is seriously affecting the inhabitant.

An analysis of the structure of energy use in rural areas in developing countries, for instance, India, where the use of biomass is concentrated, reveals that around 90% of the inanimate energy is used for cooking. A survey undertaken by the Kerala State Planning Board[3] shows that 83.04 percent of the total fuel

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* This is an abridged version. Full text can be requested from publishers.

[1] Biomass is any organic material such as wood, crop residues and animal wastes used as a source of energy.

[2] This includes all energy sources other than human and animal.

[3] Kerala State Planning Board, (1985), "Rural Energy Generation and Use Pattern".

consumed by the households in southern Kerala is used for cooking. Kerala is among the most fuel dependent states in the country. A major difference in domestic fuel consumption pattern in Kerala from the rest of the country is the complete absence of coal. The wood balance of Kerala is provided in *Table 1*. As could be seen there is a sizable gap between demand and supply. It has to be expected that the deficit is presently being met with agricultural wastes, forest wastes and dry leaves. The growing scarcity of firewood is reflected in the high level of commercialisation of fuelwood. Even coconut wastes and agro products are being commercialised.

There are three possible solution paths to the problem outline in the preceding paragraphs:

(i) Fuel substitution;

(ii) Planting more trees;

(iii) Building better wood burning cook stoves.

One type of substitution based on biomass is already taking place: burning animal waste and agricultural waste. This procedure compounds the environmental damage of soil erosion by wind and water, by depriving the land of the sorely needed organic matter.

Switching to fossil fuels seem to be out of reach for the majority of the population, if we take into account the current world economic order and non-availability of appropriate infrastructure for fuel processing and delivery.

The wood fuel supply can be increased by reforestation. The farm and social forestry are attempts in this direction. But these schemes have only a few success stories.

Fuel use in rural areas in India as in other developing countries is higher than that of many U.S. household since the energy is used inefficiently. The wood fuel is burned in open fire or in inefficient mud stoves. Studies have shown that cooking with purchased firewood in traditional stoves in the most expensive fuel option and it is a paradox that the costly fuel is used by the poor. The open fire or the traditional chulha is the least efficient, where only 8 to 10 percent of energy supplied by the fuel is utilized. Attempts to develop improved wood burning cook stoves having higher fuel efficiency have been ongoing in several countries in the recent years.

KSSP had the benefit of the experience of the non-diffusion of the improved chulha technology elsewhere, when it ventured into the chulha programme.

The factors that prevented the diffusion of these models were well received. KSSP had a clear understanding that:

- Changing something so deeply ingrained as cooking habits is not so easy.
- Innovations of this type have a greater chance of rejection because there is always an existing technology on which to fall back, if the going gets tough.
- The key figure in the cook stove diffusion is the woman who cooks on the stove.
- The expertise of local artisans would be valuable in the design.
- Families won't change their cooking habits because of abstract concerns about national energy shortages or deforestation. They must see the real benefits for themselves.
- Improved stoves are likely to play some role in the household fuel problems, but are not panacea. Compromises in the fuel efficiency, convenience of use, durability, cost and cultural preferences are inevitable.

Based on these insights KSSP has evolved a strategy of its own for the development of the cook stove and the diffusion thereafter. The success and failure of the Parishad Chulha, which has the highest recorded user acceptance and functionality among the various fixed chulha models propagated in the country and the lowest drop in fuel efficiency from the laboratory model to the field model, has to be analysed in the light of this unique methodology of technology dissemination adopted by KSSP.

Implementation of the Chulha Programme

The starting point of the development work was drawing out a few innovative ideas which were basically assemblies of a few features of the cook stove models developed elsewhere. Around twenty design ideas were conceived in all. These design ideas were tried out by the Rural Science Forums in different Panchayats on a limited scale. There were also discussed in the annual orientation camps of the Rural Science Forums. However, these field-level experimen-

tations did not have any systematic planning and were mostly based on individual initiatives of a few spirited activists. These local initiatives were consolidated and planned efforts in evolving a dissemination model were started in 1983, when a project for improved chulha development was sanctioned by the Department of Science and Technology, Government of India.

The next stage in the development work was making of prototypes based on the design ideas. These prototypes were tested in a work shed set up at the KSSP Office, Thiruvananthapuram. The thermal efficiency of Percentage Heat Utilization (PHU) was calculated for each prototype. A three-pan conceptual built in situ mud configuration with burned rice husk and sawdust linings was arrived at initially. With this initial configuration it was decided to experimentally study the effect of various parameters on the performance of the stove by conducting the water boiling test. The PHU was used as the objective function to be raised to as high a value as possible. The influence of the following variables were studied:

1. Effect of the area of the main pot hole/s and the auxiliary pot hole/s.
2. Clearance below the pan.
3. Size of the fire port.
4. Burning rate.
5. Geometry of the main and auxiliary pot hole/s.
6. Size of the airport.
7. Height and diameter of the chimney.
8. Baffle profile.
9. Effect of different insulation lining.

To ensure uniformity in all tests moulds made using tin sheets were used in the construction of the stove models for testing. The data on the influence of the various parameters on the performance of the three-pan model was analysed and three designs Parishad 11[4], Parishad 12 and parishad 21 were selected for field trails. All the three models has a fire port separated from the airport by an iron grating to ensure enough draught for combustion, a chimney to draw the smoke outside the kitchen and to generate a draught, auxiliary pot hole/s to

[4] The first digit stands for the number of main pot holes and the second one the number of auxiliary pot holes.

increase the heat transfer area and baffle/s to maximize the heat transfer. The pot holes were designed so that the vessels had a tight sealing on them. The models had lab-tested efficiencies ranging from 22 to 28 %.

The preliminary design was finalised incorporating pottery linings in order to ensure the dimensional accuracy necessary for maintaining a high level of field efficiency. This was carried out through an intensive interaction session of the KSSP technical team with the artisans at Thozhukkal in Thiruvananthapuram District.

Before field testing a camp of Parishad activists was organised. A team of activists was given rigorous training in the installation of the cook stove. A clear-cut installation programme was outline to ensure standardisation. Each trainee was asked to construct a model during the course of the training. An elaborate programme for field testing was finalised at the training camp.

The models were installed in 600 houses distributed in four different geographical areas selected keeping in view the variations in the quality of firewood, local clay, type of houses, ventilation and cooking habits. KSSP activists were assigned the task of constant monitoring of the field efficiency. A set of households was allocated to each KSSP activist, whose role was to generate field testing data through systematic interaction with the housewife and other members of the family for six months. The data thus generated was carefully analysed.

The following technical inputs were generated during the field testing.

1. There were occurrences of fire when the chulha models were tested in thatched houses.
2. There was soot formation inside the chimney.
3. Many housewives complained about the large size of the platform.
4. Difficulty in lighting of the stove was a commonly reported complaint.
5. Some housewives complained that they couldn't see the flame and this was posing problems to their cooking.
6. Longer pieces of firewood falling down from the fire port was a common complaint.

Modifications were made in chulha design to rectify these defects. The fire port and the air port openings were shifted to different vertical planes so that the clearance between the opening of the fire port and the air port can support

longer pieces of firewood without falling down. The problem of fire in thatched buildings was overcome by increasing the height of the chimney and by providing proper thermal insulation around that chimney in building with thatched roofs. To resolve the problem of sooting inside the chimney a procedure of chimney maintenance was formulated. To reduce the size of the platform the chimney was shifted outside the room and was connected to the stove with a bend pipe. The door bend was provided with a window through which soot removal could be carried out. The problem of inconvenience in lighting could not be solved. So also, the demand of the users that they should see the fire burning during cooking could not be satisfied. The inability to meet all the potential objectives does not mean that a stove design will necessarily be rejected: If the benefits of the stove design are significant enough, users may be willing to make some compromises. It was decided that both these limitations of the cook stove mostly related to cultural practices in cooking could be overcome through awareness building. With the modifications and compromises cited above three designs of cook stove were finalised.

Even a very efficient and culturally accepted stove design if little value unless it can be widely, rapidly and accurately replicated. It was identified that the best possible means of production of stoves in large numbers with some degree of quality control at reasonable cost was through decentralised production by artisans. This would also provide some relieve to the potters whose traditional craft was facing serious threat with the large-scale introduction of metal and plastic ware. An elaborate training of potters was taken up. Initially 12 potters from different parts of the state were given an intensive training to make moulds for the various chulha designs. Thereafter using these potters as trainers, training was given to local artisans in areas where they were living in clusters. Thus a mechanism of manufacturing moulds on a large scale through a network of potters spread all over Kerala was established. Asbestos pipes and grating could be bought from dealers. This constituted the mechanism of stove production in the state. Training for KSSP activists in fitting of the stove was also organised simultaneously on a large scale. Thus by 1984 the chulha models were ready for diffusion.

As of today, there are 38 agencies implementing the chulha programme in the state and 172,625 chulhas have been installed so far.

Table 1. Kerala Wood Balance (1987)

DEMAND		SUPPLY (lakhs of tonnes)	
Total demand	129.83	Wood availability from forests at the rate of regeneration	9.88
		Twigs and branches	2.31
		wood from coconut tree	18.24
		Twigs, leaves, shells, etc. from coconut trees	38.77
		Rubber plantations	5.39
		Imports	1.14
		Deficit	54.10
	129.83		129.83

Source: KFRI, (1990). "Demand and Supply of Wood in Kerala and their Future Trends."

—P.V. UNNIKRISHNAN, S. SAJITH

Alternative Housing Programme

In India, despite the quantitative growth and qualitative improvement in the housing stock, inadequate housing has become a serious developmental issue. Several studies have shown that low income groups are getting marginalised from the housing market due to *(i)* the steep rise in the value of land and price of building materials and *(ii)* the pauperising effects of the process of development which has pushed housing beyond the affordable reach of low income groups.

In the State of Kerala there has been a major upswing in the building activities in the seventies, the major contributory factor being the increasing inflow of remittance from the Gulf countries. This has resulted in an unprecedented rise in the cost of building materials, wages of construction workers and the value of house plots. On the other hand, it benefitted all those who were directly or indirectly engaged in the housing sector such as the construction workers, contractors and dealers in building materials and land. On the other hand, it affected the low-income sections of the society adversely as is sharply brought out in the survey of Housing and Employment, Department of Economics and Statistics, Government of Kerala, 1980.

The Government of Kerala has responded to the crisis by the one-lakh housing scheme, the Subsidised Aided Self-Help and the Rehabilitation Housing Schemes. Several new public housing schemes are being implemented. These schemes have not been able to meet even a sizable chunk of the demand, however, they have provided relief to a section of the economically weaker sections of the society.

In response to the cost escalation of building materials, a number of alternative techniques of wall construction and systems of roofing, mortars and plasters, etc. have been experimented and proven successful by individuals and

institutions. A number of agencies—governmental and non-governmental—have involved themselves in the diffusion of these alternative techniques. A technology package, the main features of which are:

- filler slab tile roofs
- Unplastered brick walls with rat trap bond
- flooring with paving tiles, etc.

has already proven its potential in order to:

- reduce per unit construction cost
- minimise use of scarce materials
- improve climatic performance
- generate more employment to the unskilled and semi-skilled labour

However, the diffusion of this technology package has been limited to a small circle because the middle income group, the potential adopters of the new technology, still feel that the product is semipermanent and of low quality. The diffusion has, however, gained momentum during the last few years, thanks to the crusading work of Sri Laurie Baker and the efforts of various agencies like the Nirmiti Kendra, COSTFORD, Kerala Sastra Sahitya Parishad (KSSP) and a large number of individuals who have ventured into low-cost, low-waste techniques in a big way. With the number of agencies involving in the diffusion of the technology increasing and the volume of housing activity using the alternative technologies expanding significantly the quality of work in the field has suffered. This can turn out to be a major stumbling block in widening the acceptance of the new technologies.

Studies on the trends of diffusion of alternative housing technologies show that the technology has confined itself to the middle class, leaving aside the public housing schemes. If the new technologies have to make a big impact on the housing problem in the State, the cost per unit area have to come down further to a level affordable for the lower income groups, say by at least another 50%. This requires drastic reduction in the cost of roof and openings. Standardisation of components, larger use of prefab components, etc., may turn out to be prerequisites. Capabilities in specific areas especially ferrocement, second-grade timber, etc. will have to be strengthened considerably.

Estimates on housing demand, based on the projections made in the National Housing policy requires around two lakhs of households per year. This would mean:

- 3.2 billion bricks
- 8 million cubic metre of rubble
- 12 lakh tonnes of cement
- 80,000 tonnes of steel
- 1.6 lakh cubic metre of timber, etc., and
- 20 crore man days out of which around 25% should be skilled

The scale of the requirements to be met is clear from the above. There are around a lakh of masons in Kerala who require skills upgrading. Only by flooding the housing market with masons having the necessary capabilities for taking up quality work in low cost, no waste housing, will it be possible to ensure wider acceptance of the new technologies.

— I R T C *had been organising Masons' Training Camps on a regular basis in order to meet this demand from 1987. The IRTC campus itself has been constructed through a series of Masons' Training Camps.*

From KSSP

Kerala participants gather for the opening ceremonies and pose for posterity; staff of ARENA, IRTC, KSSP take some time off behind the scenes.

20th Century Science: Beyond the Metropolis

Kerala Sastra SahityaParishad — Yesterday, Today, Tomorrow

AN INTRODUCTION IN FIRST PERSON

October 4, 1957. Myself, my friend M.R. Kurup and a few others were relaxing on the rocky shores of Bandra beach, Bombay, part of the Atomic Energy Establishment Training School Campus. We were the trainees of the first batch. Somebody brought us the exciting news: Soviet Union has orbited the first man-made sputnik, weighing 82 kilograms.

They were ahead of USA by six months and by several kilos. Kurup and myself decided then and there to learn Russian and the following month we joined the Russian language course organised by the ISCUS (Indo Soviet Cultural Society).

This was, later, to affect my entire life career in a profound manner. I decided that I should go to USSR for higher studies and was lucky to have been able to do so. That was from 1962 to 1965. In Soviet Union I had the opportunity to study their history, struggles, travails, achievements and aspirations. I have seen how well the children were looked after. I have seen how secure the life of citizens were. I felt that if there is a paradise on this earth this is it. Of course it was not the mythical paradise of the Hindu god Indra—the conspicuous consumer. That paradise was perhaps USA, with more consumer goods than necessary, with enormous wastage, with competition and constant threat

of losing one's grounds. (It is a pity that the Soviet people later opted for this western paradise and in the bargain lost everything).

Some of us, the postgraduate students in Moscow felt that on going back to India we should do something more to the people than is demanded by our paid profession. There were hectic and heated discussions, with many absurd propositions like floating a political party led by electrical engineers and the like. One not too revolutionary sounding suggestion was that we should initiate an organised movement for the development of scientific and technical literature in Indian languages. And I took the responsibility of initiating such a movement for Malayalam, being my mother tongue, and Marathi, being the language of my domicile ambience.

Upon my return to India I straight away went to Trichur, Kerala and met the Manager of Mangalodayam Publishers who had published my first book, "Isotopes and Radioactivity" and my second book, "Atomic Science." I discussed with him my idea of starting an organisation for the promotion of scientific and technical literature in Malayalam. It was he who then pointed out to me that there was no need to start a new organisation, that there was already the Kerala Sastra Sahitya Parishad (KSSP). He gave me the contacts of all important activists. I met all of them within a span of two weeks and soon I became a part of the team. For the past 28 years I have worked with the KSSP. It has changed me, changed me radically.

THE KSSP IN RETROSPECT

The history of the KSSP is, in one sense, the history of the experiences of a movement which learns continuously, which is not restricted by fossilized objectives of concepts. Its growth during the past 30 years has been from abstract to concrete, on the one hand, and from particular to general on the other hand. There is a seeming contradiction. It started with the abstract understanding that knowledge about the laws of nature and society will be useful to the society. In the course of three decades this developed into a concrete analysis of the society, of the role of Science and Technology (S&T) in it, of the problems of development, of the changing world situation and of the concrete manner in which the havenots can use scientific and technical knowledge as a weapon in their fight against immiserization. On the other hand it started with particular

activities like lectures, publications, exhibitions for dissemination of scientific information, activities like science clubs and teacher training and gradually grew into discussions on the general aspects of development, environment, health, education, etc.

Rarely it was handicapped by a mechanical understanding of the past, present or future. Nor did it restrict its scope to any particular field—say education or health, environment or development. It assimilated newer and newer ideas and also the proponents of these ideas. The chronological history of the KSSP will reveal a step by step expansion of the scope of its activities as well as absorption of persons with new ideas into its core.

In 1974 the KSSP adopted the slogan "Science for Social Revolution" and in 1978 christened itself and like-minded organisations—there were a few of them by that time—People's Science Movement. The like-mindedness emerges from the acceptance of the meaning of People's Science Movement.

It is a People's movement in the sense that it recognizes the fact that Indian society is broadly divided into two groups: a large majority which is getting continuously impoverished or threatened with impoverishment and a small minority which gets continuously enriched at the expense of the majority and that the movement takes a partisan position along with the majority (The people) and against the minority whenever interests are in conflict.

It is a Science movement because it understands that science (and technology)—information—is today a powerful weapon in the hands of the rich minority, enabling them to appropriate for themselves more than proportionate share of social production, and that the majority should be armed with this weapon in their fight against impoverishment.

It is Movement inasmuch as its scope widens continuously, its actors diversify and expand, and its ideology gets refined continuously.

The experience during the decade 1978 to 1987 gave much more clarity to the concept of "Social Revolution." It is a reversal of the process of impoverishment of the majority and enrichment of the minority. Two decades of activity and the experience gained therefrom led the KSSP to a serious discussion on the concept of "development". Increase in per capita income or per capita consumption is not equivalent to development. All goods and services which have exchange values and even use values need not have welfare values. The resources of the world will not suffice to take the entire humanity to the consumption

levels of the developed nations, nor is it necessary. One of causes of the disillusionment and consequent break-up of the erstwhile socialist states was the systematic building up of the illusion that communism means an overabundance of every sort of commodity and service and the neglect of its moral-ethical character. No society can progress towards ideal communism, unless it continuously learns to distinguish needs from greed. The people's science movement was gradually getting transformed into a Gyan Vigyan movement. Gyan in Hindi language means wisdom and Vigyan means knowledge. The peoples's science movement recognised the danger of using knowledge without wisdom.

The people's science movements took note of the increasing degree of globalisation of human society, made possible by technological revolution and made necessary by the growth of giant transnational enterprises. It also observed that this global network has begun to exhibit positive feedback tendencies, and resulting unstabilities. Individual citizens are becoming helpless pawns in the hands of giant enterprises. Humanity has reached at a seemingly absurd situation: on the one hand it is at the threshold of liberation, liberation from all wants and privations and on the other hand it is at the crossroads of calamities: social, cultural, philosophical and environmental. Unless human beings get back the control over their own lives, it is the road of calamities that humanity will follow. Here, democracy becomes the key concept, a type of democracy quite different from all what we have seen so far. The second, and perhaps the more important, reason for the downfall of socialist states is the absence of internal democracy. Participative and creative democracies is possible only on smaller scales. Small has to become powerful, not only beautiful.

NEW SITUATION 1987-1994

The year 1987 was another turning point in the history of KSSP as well as other people's science movements. The KSSP had been interacting with like-minded groups all over India from 1974 onwards. It had organized a large number of national workshops 1978 (Trivandrum), 1981 (Trichur), 1983 and 1985 (Trivandrum). As mentioned earlier the KSSP had also been using the medium of folk art and street theatre for communication, as well as for organising people, since 1980. In May 1985 it organised—collaborating with other groups in Tamil Nadu, Karnataka, Andhra Pradesh and Madhya Pradesh—an "All India Sastra

Kala Jatha" in memory of the innocent victims of the Bhopal (Union Carbide) genocide of 1984. The jatha was a resounding success. Encouraged by it and supported by the National Council for Science and Technology Communication, Department of Science and Technology, Government of India, a much more ambitious national programme was planned in 1987—the first Bharat Jan Vigyan Jatha. It gave birth to the truly pan-Indian People's Science Movement and led to the formation of the All India People's Science Network. And soon they were to embark on one of the greatest experiments in Indian history: eradication of illiteracy.

Edgar Snow asked Mao Zedong once what he considered to be the greatest achievement of China's revolutionary regime. Mao is reported to have replied, after a minute's pause, "Yes, those flies, we have eradicated them". This a very crisp way of saying a lot of things.

Eradication of flies presupposes extremely good drainage, sanitation and environmental cleanliness. This is possible only in a society whose other more pressing needs are satisfied. Similarly, eradication of illiteracy means a lot more. It means universalisation of elementary education (UEE) in enrolment, retention and achievement. It means removal, at least partially, of the causes that perpetuated illiteracy that prevented UEE. It means a new sense of achievement for the people which will prompt them for more achievements.

There were many in the political, educational and administrative hierarchies who believed that illiteracy eradication can succeed only in the wake of a major social upheaval, a social revolution. Hitherto world experience of successful literacy campaigns is derived from societies in the throes of social change—China or Cuba, Vietnam or Nicaragua, Burma or Tanzania. Very few people believed that an illiteracy eradication campaign can be successfully carried out in India today. Several reasons were put forward to prove this: that illiteracy cannot be eradicated without a social revolution taking place; that the task is so huge that it will never be possible to raise the human material resources for achieving it; that without ensuring universal elementary education it is futile to carry out literacy programmes; that it is meaningless to force universal elementary education when the bulk of our people feel that the present education is irrelevant to them; that it is impossible to generate the infinite social will required for this except under extraordinary circumstances like a freedom struggle or a revolution.

Clearly the argument was that one cannot and should not start with literacy,

but with social change. People even went to the extent of arguing that illiterates are illiterate because they do not feel any necessity of being literate and that nobody has the right to "impose" literacy on them, even through friendly persuasion! There are no text book or logical replies to such arguments. So the best way is to go to the people and ask them, ask in a way that will generate confidence and not cynicism. KSSP went to the people of the Ernakulam district of Kerala and they gave an unambiguous reply. More than a lakh and half illiterates came forward to learn and more than 20 thousand volunteers were ready to teach them. Ernakulam became the first fully literate district of the country. It also heralded a new movement.

KSSP raised the question: can a planned and massive movement for literacy precede a socio-political and economic upheaval? And further, even lead to one? There is no answer to this question either, in any text book. But the years 1989-94 have shown that a mass movement for literacy is possible. Today there are nearly 50 million persons who have become or are becoming literate. And nearly five million volunteers are engaged in teaching them. Certainly, this is the greatest mass movement after independence. There is, further, enough proof to show that it is engendering socio-political upheavals of a sort. It was not accidental that constitutional promise of free and compulsory education for all up to the age of fourteen was not fulfilled. There are vested interests to perpetuate illiteracy. They feel threatened with the spread of literacy. The movement has already shown the potential to develop beyond literacy. The sense of liberation and self-confidence it imparts can go far beyond learning letters. It can liberate the poor and the neo-literate from cynicism and fatalism and instill in them a sense of optimism and faith in a better tomorrow and faith in themselves.

A totally new set of agendas has unfolded before the people's science movements, partly due to the emerging world situation and partly due to their increased capability to go beyond science popularisation or literacy. Stated simplistically, it is to empower the people to manage their own affairs democratically. But they are no longer "weapon manufacturers". They have to become soldiers in the battle for social change. This battle is to be fought not in Delhi, but in the villages of India. The fight for democracy is also a fight against the minority which appropriates democracy for itself. This has to start from the villages and go up to Delhi.

This is no longer a past time. It is real battle, with all its risks and dangers.

Without a proper world outlook one would not get the courage and conviction necessary to take part in such a real life battle. We have made an attempt to develop such a world outlook, tentative though it may be.

THE WORLD SITUATION TODAY

Human society is passing through a critical period. Never before it had to face such rapid and such unpredictable changes. Humanity is being drawn into an unfathomable whirlpool generated by the relentless laws of capitalism. But it is unaware of the danger. This is most tragic. It is still not too late to avert the catastrophe, provided we recognise it and act accordingly. In the least number of words this whirlpool can be defined as "all round mafiafication of human society". The rule of the jungle is returning—in a new form through the conscious abuse of "Knowledge". The sense of collectiveness and culture which differentiated man from animal is being massacred. The assassins range from sophisticated Multinational Corporations to the crudest of local thugs.

Make money, more money by hook or crook: this is the slogan prodding societies world over—not only in capitalist countries like the USA or developing countries like India but also in former socialist countries of Europe and Eurasia and even Socialist China. Its repercussions can be felt in all the spheres of life—economic, political, social and cultural. The most apt definition of any government is "an institution to legitimise mafia". Its consolidation is being considerably helped by the scientific and technological (S&T) revolutions of the second half of this century.

The S&T revolution has also led to the "globalisation" of the economy of individual nations. The MNC's are able to effect global division of labour. Control over raw materials, capital, market and even labour is becoming more and more centralised. The corporations are stronger than any national government, even the USA. In fact, they control the governments. Institutions like IMF, World Bank etc. are, in fact, their instruments. The MNC's establish their hegemony over the world nations through their control over market, through the appropriation of "knowledge" and through the application of military power. The socialist bloc which offered persistent resistance to the expansion of MNC's for three decades and more, does not exist now.

There is yet another consequence of the S&T revolution: the knitting to-

gether of world communities into an inflexible, hard-wired megasystem. Any movement taking place in any corner of this system rapidly spreads through the entire system—the entire world. Even primitive tribals in far off lands experience this movement. More important: this system is showing positive feedback tendencies. We have a runaway system. Even small incidents quickly flare up to uncontrollable dimensions. Even the omnipotent mafia becomes powerless against such flare-ups. In a situation where nuclear weapons capable of destroying all life the world over a number of times are stocked in several countries, the implication of such uncontrollable flare ups is frightening.

Another disconcerting outcome of the S&T revolution and globalisation is the exorbitant power it gives to individuals. Heads of MNC's and their governments are unimaginably powerful. Wrong decisions by a few persons can play havoc. One kilogram of grey matter—the human brain—is today more powerful than all the nuclear explosive put together. This is potentially a dangerous situation.

A society whose motive force is private (corporate) profit is pregnant with the necessity of developing into a runaway system. Goods and services will have to be produced and exchanged at a continuously increasing rate. This is an unstable situation. Goods are required to satisfy human needs. Basic needs like food, clothing, shelter, education, health, recreation and rest are limited. Even comforts of life demand only limited production. This level of production will not satisfy the increasing greed for private profit. Only by promoting useless and wasteful consumption, production and exchange of goods and services can profit increase without limit. The consequences of such an unlimited growth is what we see today—megafication of production and increasing concentration of economic power on the one hand and uncontrolled depletion of natural resources and disastrous ecological breakdowns on the other hand. Both these are grave threats to the continued existence of human species and may be even of life itself.

There are limits to the present type of growth. The per capita income of an American citizen is 60 times more than that of a Keralite. Yet if one compares the real indices of the physical qualities of life of the two people, the difference is only marginal—literacy 99% and 95%; life expectation 75-76 years, 71-72 years; death rate 6 and 7; infant mortality rate 10 and 20.

More than 90% of the average American consumption is sheer waste. It is impossible for the six billion population of this globe to achieve the American

level of wastage. That is neither necessary nor desirable. Unfortunately the developed nations do not accept this. Nor do those within the developing nations who enjoy undue privileges accept this. Presently the world is divided into two major blocs: a small number of highly developed, powerful and rich nations and a large number of poor and servile developing nations. Within these developing nations the society is divided into a majority which is continuously getting impoverished and a minority which at the expense of the majority gets continuously enriched. The haves of both the developed and developing nations have quite a different view of the situation. They accuse the have-nots—who multiply like pigs, for the present impasse. They are unfit to live in this world! The slogan "eradication of poverty" gets converted into "eradication of the poor". The manifesto of the haves proclaim: "Ye, the haves of the world, do unite. You have a world to lose. Eradicate the have-nots or else they will eradicate you".

ROLE OF PEOPLE'S SCIENCE MOVEMENTS

The PSMs had to respond to this world situation. In fact, the KSSP has been sensitive to this emerging situation. The importance it is giving to empower the people is based on this understanding. The past decade, especially the period 1987 to 1994, saw phenomenal growth in the spread of PSM's.

The have-nots do not want "fair distribution of poverty". They want the satisfaction of basic needs and be assured of minimum comforts. For this, production has to be increased several times. Very true! So let us increase production first. The question of distribution can be taken up later, they are told. It only means "the poor produce, the rich consume". We cannot agree to this. Production has to increase without losing the grip on distribution. There are, however, limits to the increase in production. Definitely it cannot be the objective to "catch up" with the USA and other "developed" countries. No, the objective is to see that there is enough production to satisfy the basic needs and comforts of every human being in this world. This cannot be achieved without curbing the wasteful consumption of the haves of today. Obviously they will not accept such a proposition. They will tighten the wiring of the megasystem in their attempt to preserve their gains. S&T serve them as very useful weapons. Unless the have-nots take control of the production, they will not be able

to plan its components or its distribution. The problem of have-nots taking back control had been on the agenda for the past one century. The socialist revolutions were intended for this purpose. But one by one, all of them are losing the grip. The haves are taking back control again. KSSP had accepted the slogan of "Science for Social Revolution" 20 years ago. The social revolution envisioned was nothing short of the process of have-nots taking control of the societal processes. The question is, how to do it without losing the control immediately thereafter. One has to learn from history, the history of socialism. First in Russia (Soviet Union) and later in many other countries the "havenots" took power in their hands. They began to build up new societies and new human beings in their countries. They nearly succeeded, but not fully. They were, in most cases, especially in the USSR, able to assure the basic needs and minimum comforts to every citizen, assure the necessary growth in production, assure the necessary stability in the society. For quite long everything was going fine, at least it seemed to be so. They were developing as models of paradise on this earth.

But then the entire system crumbled. The ground rules on which they began earlier were all discarded. In USSR and the socialist countries of Eastern Europe the breakup was traumatic. Everything that was considered bad and detestable resurfaced. Why did this happen? What lessons are to be learned? There cannot be a single and simple answer to these questions. The process of breakdown was different in different countries. However, on closer examination one can discern two very important aspects which might have contributed to this breakdown. In all these countries the power of have-nots got a form called "dictatorship of the proletariat". This was to be a highly democratic setup, dictatorial against only the counter revolutionary forces, against the haves attempting a come back. But in practice, in every country this became the dictatorship of the political party of the proletariat which soon degenerated into the dictatorship of its leadership. The democratic element instead of getting continuously strengthened, was continuously weakened. The parties became more and more alienated from the people.

It is, however, ironic that the people of the former USSR and the East European countries have the illusion that societies based on market economy, the capitalist societies, have more democracy. In fact, there is no democracy in the USA, UK, France or in India, Pakistan or anywhere else. What they have is sham democracy, proxy democracy—both in form and in essence. In the USA only

about 50% of the citizens vote, and the victors get 50% or less of votes. Only multimillionaires can aspire to become President of the USA. Economic concentration necessarily leads to political concentration. There cannot be any democracy in a society where the entire economic power is concentrated in the hands of a small minority. After all, what is the meaning of democracy if it is not people's control over their own lives? And where do we have it? True democracy has to be fully participative.

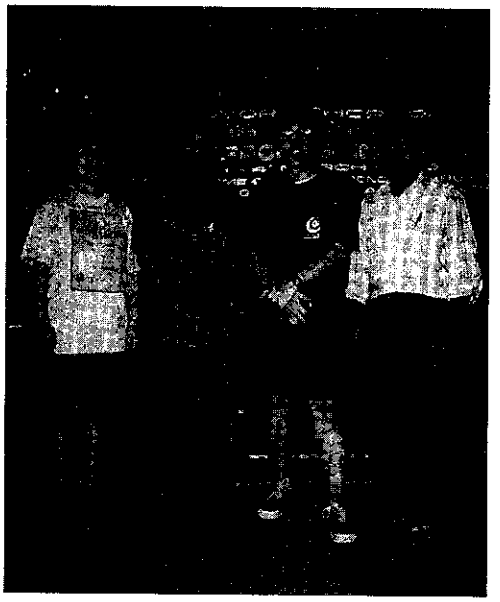
In all the socialist experiments hitherto attempted, only relations of production changed, but not the nature of the forces of production. The target of every socialist country was to "catch up" with and surpass the capitalist world. They wanted to produce the same commodities. They organised production on the same lines. They wired themselves into the same global market. The average citizen in these countries likewise became more and more alienated both from the means of production as well as the process of production. Concentration of economic and political power without even the regulatory check of market competition must, ultimately, lead to its breakdown.

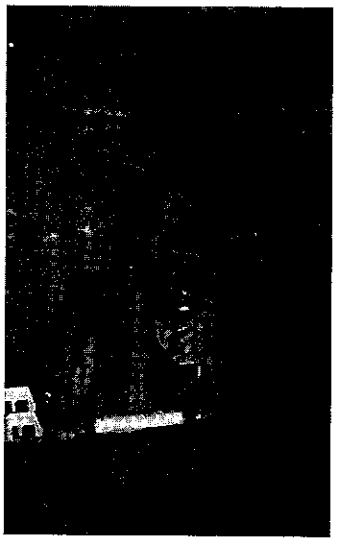
More research will have to be done to bring out the process of the breakup of the USSR and other socialist countries. But some questions have to be asked.

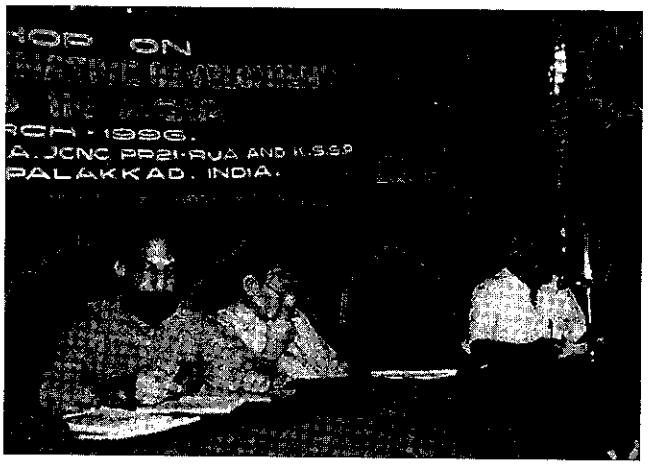
Can there be socialism without democracy?
Can there be democracy without creative participation of the people in the process of production and distribution?
Can there be creative participation in processes which are too big and global in character?
Can there be people's participation in the operations of transnational corporations? or even national corporations like, say, National Thermal Power Corporation?
Can there be continuous development within an unstable positive feedback system?

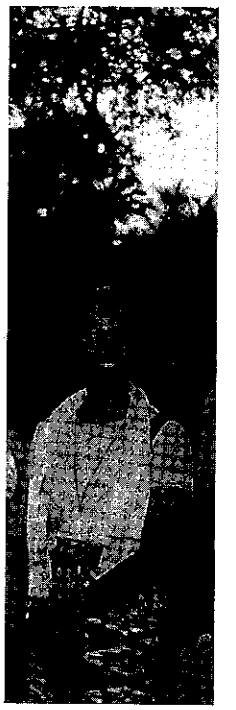
The world experience so far prompts us to say: "No, no". It becomes imperative to cut open a new path to socialism, a path of continuous strengthening of democracy. The long-term objective is not unlimited and exponential increase in the production of goods and services, but the mobilisation of every citizen to creatively participate in the process of production to satisfy the basic minimum needs and comforts of all. To achieve this we shall avoid the process of

CRITICAL REFLECTIONS









Top left: Lau Kin Chi, Vinod Raina, Ed Tadem, James Keezhangatte (ARENA Board and Secretariat); *Top right:* Urvashi Butalia; *Lower right:* Dessa Quesada; *Lower left:* Raina, Muto Ichiyo, and M.P. Parameswaran

IADEA and Beyond

(This meeting, composed of people associated one way or another with ARENA, KSSP and JCNC-RUA, was held last Oct. 9, 1996 as part of evaluating the IADEA workshop held last March 1996 at Palakkad, Kerala, India. The discussion was also an effort to examine critical issues that surfaced during and after the workshop. The meeting coincided with the ARENA Congress at Soong Sil University, Seoul, Korea.)

Participants:

MP: M.P. Parameswaran, *Kerala Sastra Sahitya Parishad*
VR: Vinod Raina, *EKLAVYA*
UB: Urvashi Butalia, *Kali for Women Publications*
MI: Muto Ichiyo, *PP21 Rural-Urban Alternatives*
ET: Ed Tadem, *Asian Regional Exchange for New Alternatives*
LKC: Lau Kin Chi, *ARENA/China Social Services and Development Research Centre*
DQ: Dessa Quesada, *RUA*

DQ: We haven't really had time to assess the IADEA workshop fully as convenors. And the audio-recording of the sessions has not been of much help because of the quality of the sound. Nevertheless, in light of the report we are jointly publishing, we can have this session as a way of finding out what we all thought of the workshop, and especially from the viewpoint of Indian groups, what sort of significance or impact, if any, this workshop had on the Indian participants and the community in Kerala.

MP: We had a meeting of our Executive Committee for evaluation. It is the first time for us to be involved in a meeting where a lot of non-Indians were present. People had asked initially: who are these people? where are they coming from? But by and large, two or three things made our people quite happy to see that we are not alone, that there are many other people also going around thinking, having more or less similar problems and trying, though not exactly the same way we are struggling, various ways of solving those problems. So to have the sense of not being alone is one thing. That is one level of understanding.

Secondly, they were excited with some of the products exhibited by the Thai group and others such as the sweetened tamarind and various types of agro-products. Our people were quite excited that we could also make our own similar agro-products.

People, though, said they could not understand the Korean Our Wheat Revival Movement. They were not able to understand the sense of the movement where cost of production each year is three to four times more than that of imported wheat. They couldn't understand why it should have that much difference. They say this because one of the important aspects of our Keralan context is that our agriculture is stagnant. So we have been involved in efforts to improve our agriculture, to make more people confident again in agriculture. So the Korean experience wasn't too helpful.

By and large, our people had been happy with that workshop. Generally, two or three things: one, is the feeling of solidarity, and two, the feeling that various products can be developed. Beyond that, we did not discuss in this meeting. And because I could not attend all the sessions as I was going around, I don't know what our people extracted from the actual sessions because they have also not written them down. Maybe we can still obtain something from the audio recording. But many people spoke in a very low voice, or the amplifier system was not very good. In many places, it was not audible. So to what extent our people had caught it, I don't know. So whenever we do something like this in the future, the system must be much better and also our people have to talk loudly. That's all I can tell right now.

DQ: But in your discussions after the workshop, did some people express any particular interest that they wished to pursue?

MP: One interest was agro-products, dried fruits and things like that.

DQ: Food processing?

MP: Yes, and we have been doing that earlier also, but got a confirmation that it is possible. So we are definitely going for jackfruit, and two or three fruits, and we are in the look out for technologies to help us.

MI: So you said that people felt that there are other people from other parts of Asia doing the same thing and the sense of solidarity. Am I correct in saying that the encounter between Kerala people and SE/NE Asia is rather new. What kind of discovery was there for the people they met for the first time?

MP: The discovery has two aspects: one, everyone else has more or less similar problems, and two, everything was subcritical, too small to make an impact anywhere. With this kind of action, we won't reach anywhere. That feeling was also there. Too small to have an impact on world affairs. The effort is too small unless it's multiplied by several folds, or you may spend a lifetime without achieving anything.

MI: Is this a problem you have yourself, or only problems you find with other groups who came? Yourself having built up to a large movement, and spreading all over India, do you yourself feel that way?

MP: We feel small. But there's a major difference between our Kerala movement and a large number of other movements in India. But a similar difference exists between our movement and the type of movements that met at Palakkad. They are doing things in an NGO way, replacing all the mainstream movements. Just doing things in our own way will not help. Our efforts should ultimately be to change the mainstream events. Whether it be in politics or economics, we must intervene in the mainstream and transform the events. Without this, we will not be able to make much of a headway. Now whether we are capable of doing that is another matter. We have to be sufficiently massive. In the last few months, we have been making considerable headway in changing the mainstream, at least in Kerala. During last May's election, the Left Democratic Front came to power. One of its most important instrument is the State Planning Board which plans the whole economic activities. The Vice-Chairperson of the SPB, Prof. Gulati, has been working with us for the last so many years. He is

with us in our movement, and two of our members also became part of the Board. So today, we are able to influence the Kerala state machinery to run some of our projects, and in a way the state plan is transforming itself. To what extent the entire bureaucracy is going to transform itself is a different thing. But we are setting a course that probably will be irreversible after some time in a way that ensures participatory democracy and decentralization, making people at the lower level, at the village level take hold of the power. This is definitely several thousand times more than what we could have achieved if we had only followed the small NGO course.

Now this agenda of getting into mainstream economics and politics, and transforming that was not seen among the groups which met at Palakkad. Alternatively, we ourselves can grow into the mainstream. Otherwise, we will always be in the sidelines.

So, to summarize the points: one is that we are not alone; two, there are so many technical initiatives (e.g. food processing) that we can also use; and three, the way we are conceiving everything is too small, unless we think much larger and start interacting and transforming the mainstream, we can spend all our lifetime contented with ourselves but not transforming the society.

VR: For the workshop, and the Indian kind of a thing, there is no more Indian reaction than what you would get from people immediately who were in the workshop, but even from them, other individuals who were present came more for the exposure. And for them, it was interesting to know what people in the other parts of the world were doing. So it was kind of enlightening to them, but beyond that, none of them had been able to kind of elaborate more on any issue that I am aware of. So to that extent, in my kind of reading, the Indian kind of thing would be limited to how KSSP might have seen it, because KSSP was the only group represented in that sense. The other thing that we must remember in the Indian context is that South Asian or Asian conferences on alternative or rural development are quite common in India. So to a certain extent, this is just one more among them. And the trouble is, if it was held in Delhi it would have larger participation and visibility. But if we hold it somewhere in Kerala, particularly in rural Kerala, you are going to suffer on that count though the other positive aspects are much more than if you went to an urban setting. So you will not have many Indian interactions because you are in a very remote corner. So in India, very few people will know that it happened unless we told them about it.

About the conference, I remember that Ravindran and E.K. had both spoken at the last plenary in detail and I remember quite a bit of what they said, and I think that's quite important if you wanted to get the reactions from the participants, and both E.K. and Ravindran had each 15 minutes of long speeches. So if they can be retrieved, towards the latter part of the program. I remember they talked about the reactions from the local 'panchayat' which is the local body. I think they had a meeting with the Chinese participants. They had feedback from them about the meeting and they have comments like, "We always thought that foreigners were just white-skinned, and they were not like us Indians... and we didn't realize that farmers had similar concerns." Useful comments.

DQ: Was there any particular workshop discussion at Kerala that most impressed you?

VR: Well, one of the very good discussions was on the Chinese paper. I thought the discussion was very good. People had a lot of queries. I think there were very genuine questions of interest as to the extent that this alternative trade can go, and can it be expanded to other products. Is it a dependency relationship or how can it be an independent relationship. And I think it is partly because the Chinese paper itself had tried to raise these questions.

Frankly, I found the discussions on organic agriculture not very good. The level of discussion did not rise to any particular level. There were questions like: what is the scale of operations, is it economical if the scale of operations are more, will there be an abandoned quantity if you are operating at provincial or national scales. Would those kind of resources be adequate? Have attempts been made to evaluate that? You have some saying, "Oh, of course, that can all be done and there is no problem. That can all be solved." So I thought that a discussion on a critical size and what would determine this critical size, moving from subcritical to critical, would have been useful. But it was inadequate.

I thought that the South Korean paper was very interesting because it was complete with rigorous data, and if you wanted to examine it in terms of productivity, manufacture and so on, it actually went on to very serious details rather than making general statements. Stemming from a somewhat nostalgic kind of revival of wheat, it went into very serious details. Although all the data

are wrong in the paper. I think there is a problem of converting the counting system, all the zeros are wrong so you can't make any sense of the whole thing. But that paper had those details which were a counterpoint to the organic agriculture discussions.

I had reread those papers more than once because I had to write that paper for ARENA's Alternative Development Conference so I had to go through them more carefully. I like the Thai Chiang Mai organic farmer's case study along with the accompanying country write-up that situated her work within the country. Particularly the rigorous details which were again very impressive in terms of investments she had to make for organic farming like pig droppings. And she even gave details about amounts required, money required. Then the class of agricultural products she has been experimenting with. And value addition, though she did not use the word, saying that it's not enough to produce vegetables but that she wanted to do food processing because that takes in more. But it is not only in the production manner that it was important, but also its insights of a sociological kind—the families involved, the fact that her mother was ill, and she therefore invested her income...I thought that was very rich as a case study.

The other one that impressed me, because they were talking about things in larger scale, and its scale of operation made it quite important for us to look at the feasibility of expanding them: Alter Trade Japan. However, I think that the two papers presented, one from the Negros side and the other from the Japanese side, lacked details. They went into a lot of historical things which was good, but we also wanted to know more about details like how would you transport perishable bananas across the country, what kind of packaging, what kind of transportation are required. So the scale of operations which should have made the people understand what the trading entailed...

MP: Yuh, like specific consignment size...

VR: ...size, what is the perishability of the bananas, what is the quarantine law of Japan which are applied to them, and how do you ensure that those laws are met? Those details are totally missing.

But there were other questions about that which were raised during the discussion which are more fundamental, like trying to situate an alternative trade program which is supposed to be an alternative to a capitalist trade system but

is operating within a capitalist board, so how can it survive in a capitalist market competition? And these were interesting questions because the example was so good, it has the potential to raise these questions. It's the positiveness of the program that such questions can be raised.

I think in a similar way of the Chinese paper, although the Chinese paper was far more rich because it gave insights into the organization, particularly the problems involved. The paper was very insightful in those terms. It went into details like when the women had to decide whether to buy the grinding machine or the coal machine, and how the decision had be to be negotiated. Which really brought about what people finally tackle when they are actually working. It's not an idea, it's actually how to make the idea work. Decision-making processes, management structures, control of decisions-it clearly showed the problem of collective decision-making and how they could work out. So the paper, in fact, went many steps beyond stating that this was merely an exchange of goods between HK and China. But then again in that paper, especially now, the question of sustainability of such arrangement becomes important because it was largely dependent on dedicated persons in HK to be handling the project rather than a systematized trade. So if the scale becomes bigger, can it be done in terms of this more human interaction rather than a system? So what kind of system can be formed, given the political implications that it is China, and we're not talking about the Philippines and Japan? So one of the things that came to my mind when doing the comparison was that it would be interesting to compare the different political systems under which they were operating (Philippines, Japan, China and HK) and how would they be a factor in determining the future of them.

I found it rather obscure a case study, in terms that no one has heard about it and I don't know how many Japanese are aware of it—the Okitama Women's Network. I found it absolutely fascinating. Really fascinating because it raised so many interesting questions— how women are going into agriculture but at the same time trying to break patriarchy and taking these two together in a manner that is extremely new to me. I wish there were details in that program. It was quite sketchy, but raised so many questions especially related to alternative development and gender. But I have no clue how important or how serious that effort is within Japan. Is it just a marginal effort or something well-known or are they in touch with other places? And how do Japanese themselves look at them? Well, how do they react to all that and so on? They were critical in their

own approach when they talked about one of the consequences of their decision not to marry was that there were foreign brides coming in, and this is a problem they find and don't know what to do, so they're holding classes with these foreign brides and trying to tell them about what and why they're doing. Again, this was sketchy but I thought that this could be another good study.

My feeling about the Kerala workshop is that 12 countries, 12 case studies, six very good is a very successful event. The other thing is the interaction between the various groups that took place. That was very powerful, like the organic farmers' informal meetings. I really felt that what could have come out of the Kerala workshop was to try and get more focused sectoral gatherings. Get the alternative trading people together, the organic farmers together, get the rural technology people together-specialized and intensive kind of workshops rather than a general one. I mean, it's not either or, but you may have that and this one, too. Because immediately when you have three or so organic farming groups, they want to sit together and learn from each other.

DQ: And they would have very specific concerns and problems that they themselves can address more adequately...

VR: ...which gets lost in a general format where they become technical questions. These technical questions are their life questions because they're battling with them. So the general format does not leave some space to take up those questions. So I think for practitioners, if we could say, in the next three or four years, without saying who are "we" if it's ARENA, RUA or KSSP, but anyway, if we could have four workshops that are devoted to particular issues—transborder trade, organic farming, maybe manufacturing (like soap) or food processing, that might be very worthwhile.

DQ: Do you have something to add, Urvashi?

UB: I remember as much as Vinod— the China paper was very good, the China discussion was very good. It was good because it was quite honest in tackling the problems of how to actually sustain an activity of this sort, how to achieve the balance between being alternative and trying to work with the mainstream...but all these points already came out in the discussions.

And also the point that MP was making about not being isolationist, know-

ing how to operate otherwise you won't be able to transform the mainstream. I think some of the groups have that sense of being small and no wish to get out of it, which struck me as a very uncritical and problematic way of looking at survival and sustainability of those groups.

And it was quite interesting to articulate those experiences in the face of the experiences like those of KSSP's, which is actually spread out quite widely. The evidence was there for all of us to see-taken to the housing project and all of that. I was struck by the fact that none of that had an impact on the kind of questions some of the smaller groups had interest in. But that's all that I have to add to Vinod.

LKC: Just now, we were talking about the groups being satisfied and closed. But I think it's not the case with the Chinese women. For the women's credit union, ever since the beginning of the project, the women have always had the sense of failure, that they're not doing well enough, that they're under a lot of pressure from the men, from the women's federation, from us, from outside. I think somehow it reflects the kind of situation that they always find themselves in-a strong sense of insecurity and uncertainty as to what might happen. This is a lack of confidence because in presenting the case, they had a lot of discussion among themselves and they have had pressure not to talk about negative things. But they actually have come out bravely in the session. And there is this whole process, from their leaving the village, all the drama in the plane, in the airport. It was so dramatic, and there was a lot of tension within the whole team. And so I think we were quite glad that they all managed to arrive, be there, and all managed to return home safely and we thought that was already quite an accomplishment.

I asked them about their experience and it has been very positive for them. They were very interested in meeting other organic farmers, and they were very comfortable being in Kerala especially after going to the 16th floor in HK and feeling that they were in the air. Somehow in a way, we had been quite insensitive to these changes for a rural woman to be suddenly within 48 hours to be in a place with all these buses and traffic, then going to the elevator to the 16th floor. It was really quite a painful experience for her.

But I think being there in Kerala, and meeting the people, they found a lot of things similar to their own environment. And you could see that they all looked so happy. And they were very interested about how to make the manure,

and actually they paid a lot of attention in trying to catch up on what others were trying to say, such as terms like globalization that came up even more during the PP21 meetings in Kathmandu. But then later on, they simply said "no" when the term was mentioned again. But they had a lot of interest on the solar energy, many things. I think the question is how much they can bring back to the village. They said that as soon as they came back, they held a big meeting and the keenest interest was on "how did you feel when you were flying?". And it was rather difficult to translate their experience back into their everyday life. And whether it added on to some of the internal tensions within the credit union, or...

DQ: What do you mean by "internal tensions"?

LKC: For example, it was seen as a privilege to travel abroad.

MI: And twice in a short time for Wang Hualian and Li Sujin.

LKC: Even for Li, as a cadre in the women's federation, she also had pressure because many leaders ranking above her had never been abroad. So especially for Hualian, it must have been a lot of pressure. And so in a way she also felt that she had to do something so she could justify having been out and then coming back with something meaningful. There are still a lot of these problems within the organization that they have to deal with.

They took down a lot of notes, they listened carefully, but then how they reacted to other experiences apart from the organic farming aspects, that we are not sure. I think with the presence of all these strong empowered women from rural and other places, they reinforced each other. So there might be effects that may not necessarily be the intellectual type, or that which could be put down in black and white. Especially with this type of interactions, there may be impact or reinforcements that could be intangible. And after Kerala, they went to PP21 and were able to see various peoples and visit the urban poor and some women's groups, and they also found that very positive. But they didn't have much interest on the discussions about globalization.

UB: I think I can add to what Kin Chi is saying, now that she is talking about it. I was thinking that my reactions were quite impressionistic, coming from

myself, but I think that from the discussion it was quite clear that it was very important for all the groups to learn about each other's experiences and share even if the broader problem of trying to grow big or dealing with the outside world was not necessarily fully addressed. But just sharing and meeting like-minded people was actually of great interest, like the women farmers and others who were talking to Mr. Upawansa in great detail about all his views about the right season and the right time, the spirits of farming, and so on.

LKC: And just to add one more. Remy from HK was also there to act as interpreter. And then she went to the exposure trip, and then she came back and was quite interested about what was happening to Kerala so she read all the ten books, the Bharat Gyan Vigyan Samithi (Indian Knowledge Science Association) literature and they organized now a team of eight to ten translators and they have already divided up the work to translate all the ten, and then they are also translating the book on health and the literacy campaigns in the panchayat.

And so now she would be going around and often she would quote these examples from Kerala. Because before that she was the academic type, she liked to do her studies. And somehow she came because she has never been to India and we asked her if she could help in interpreting and taking care of the others. Before she came, she has been with us, and she knew that we had all these books about alternative development, but she didn't have that particular interest. But after being there, now she's become quite a core member.

VR: This one aspect of the workshop that strikes me and wanted to share. It's my impression, and I might be wrong, but I would also like to know from others what their thoughts about it are. I remembered that when we had planned this workshop, particularly the second planning meeting in Kerala (Aug. 1996), we said that there would be case studies and practitioners. But there would be a few critical people, critical in the sense that they would not necessarily be practitioners, but who would be there and would help try to abstract the discussions...

MI: ...category three.

UB: What was the category?

VR: In the planning we had, we identified three categories of people who would come. One was the practitioners, two was the "us" kinds, and the third was the professional kind of people who can abstract, the intellectual-activist type. And the idea was that after each case study, there would be a discussion follow-up which would take the case study, situate it and take it beyond. My impression is that it didn't work well.

ET: But how did it not work well?

VR: I think what happened in this more regional setup with a mixed group, to conduct a discussion from something like people's own lifestory and then for some people to try and take it beyond, there was no problem in doing it but the atmosphere does not allow it for you to take the discussions to a level in which other people could not fully participate. Because then it goes to terminologies and those abstractions. As a consequence, these critical people were trying not to be critical. I think they held themselves back. Two people told me, "This is not the proper place for us to come and present any kind of abstractions because it will just alienate others." So many of those people actually held themselves back. So their contributions could not really be brought out in the manner we had planned.

ET: Maybe it's the higher level of abstraction. But I think there were some middle-level abstraction.

VR: Yeah, but they had more things to say which they were prepared to say outside but not in the group. And they felt that, "Look, we're finding it very nice listening to them but we have questions, though we don't want to raise those kinds of questions in this atmosphere because we don't want to make them feel that this was too high-grounded." And I remember a particular incident where it happened. There was a discussion that had a bearing on international globalization, and a couple of us got involved in interpreting it in terms of development and GATT terms. And we forgot where we were and we immediately realized it was wrong and it had to be given up. But for about three to four minutes, there were only a few people who could relate to each other because of their backgrounds. My feeling is that it didn't work there.

MI: Actually, this was a joint project of three groups: KSSP, ARENA and JCNC/RUA. KSSP hosted us. For ARENA, this was part of its own program and the characterization is case study. For us, it was part of a series: Beijing, Negros, Kerala and Kathmandu. So, the target to be achieved we didn't define very clearly. It was more than a case study. But we didn't discuss further strategies and policies for networking. So it's somewhere in between. So the kind of question MP put forward in the beginning, instead of talking about globalization and its effect, we could have asked everybody the question: "how far can we expand this?". Whether we can really make it viable in an ever-growing endeavor in systems-building. And I think, this is my retrospect, that we should have discussed it.

DQ: Expand in relation to their projects, or the kinds of interaction...

MI: ...interaction and if these are individual efforts, how it's possible to extend it, make it more meaningful, get more people...

ET: You mean in terms of building the network, and having a similar kind of activities.

MI: Yes, but also in terms of spatial development. Because that is where many efforts are stuck.

VR: What is spatial development?

MI: I mean expansion. Like if a single family is doing organic agriculture, how can the result be spread to other farmers, in the same place, to the neighbors, or beyond that. In this regard, we can learn from the Kerala experience, how they became successful and in what manner. So it's somewhere between globalization and actual ongoing practices.

MP: If we had raised the question to each group— "What is the significance of their work in the larger perspective of their own setting?; how would they rate themselves?"—that would have provoked them to think about these issues. But it was not asked.

MI: And concerning organic agriculture, there is a global network which meets regularly and is quite powerful. Like the duck-growing farmers. I attended one of their meetings in Kyushu. Many people came and it was quite good. SOAP, yes, that's an effective regional network. So there are already such efforts. And in those meetings, globalization doesn't come into the agenda. And so it develops along that line. The question for me is, how the whole community can be changed, not only by introducing natural soap or something like that. For instance, I visited organic farmers in Thailand, one after another. My impression was that they are still isolated. They are all excellent farmers. But in the whole village only a few are engaged in organic farming. So that issue could have been raised more clearly for discussion.

ET: But Muto, given the character of the organizations that came together that organized the workshop, if that had been raised as a practical matter in Kerala, am afraid it would have ended in a dead-end kind of discussion because it actually came up-the groups in organic farming wanting to meet again with Korea saying, "Yes, we will host it.". So what's next? But no one took the initiative later on.

VR: The other problem is that though it is desirable what you are saying, this also comes to a dead-end for another reason that it is a kind of individual or small-group efforts. And merely saying that KSSP has done it and therefore they could understand, then you'll have to get into the nature of organization of groups rather than organic farming per se. And it will not be like all these scattered groups can come together and it will be so nice. It's a much larger problem which involves political thought, and merely asking practitioners to address it comes to things like, "Oh, if someone wants to do, we will always help, we'll be ready, we hope other groups will take it up". It doesn't go beyond that and are we ready then to have the discussion on that level, particularly with practitioners?

MI: But with the duck farmers, there exists an underlying philosophy, because without this, networking will not occur. There is an underlying philosophy which created these technical networks. And as long as technical networks define themselves only as technical networks, the underlying potential never

surfaces. That's the point I wanted to raise.

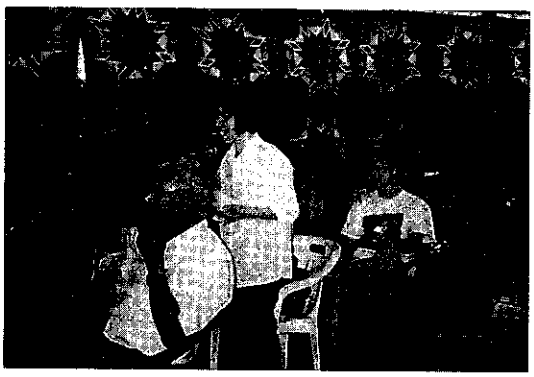
ET: Perhaps some of the groups that went to Kerala are now feeling let down, disappointed because there was no follow-up. Decisions were made to have a follow-up conference, Our Wheat Movement to hold it, and we even set a tentative date. But who was going to do it?

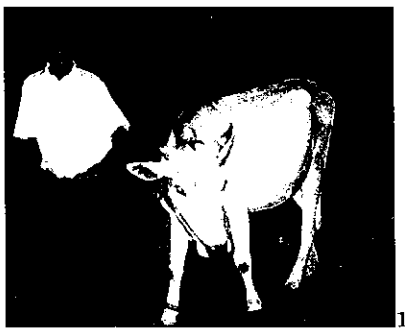
Now for a short, forward-looking postscript (as of this writing, in late January 1997). On the ARENA planning boards is a workshop-conference that will look at various existing general theories on alternative development. This is part of ARENA's series of workshops on alternative development, and will attempt to synthesize the practice-centred discussions during the IADEA workshop, and a subsequent symposium focusing on alternative development theories. This will be held in Quezon City, Philippines in February 1997.

RUA and JCNC recently met with leaders of VACVINA (National Association of Vietnamese Gardeners) in preparation for a proposed December 1997 affair called, "Red River Delta Gathering of Asian Farmers" which will focus on three themes, namely, 1) organic farming models and practices, 2) Asian rural women's situations and challenges, and 3) the impact of market economy and globalization on agriculture.

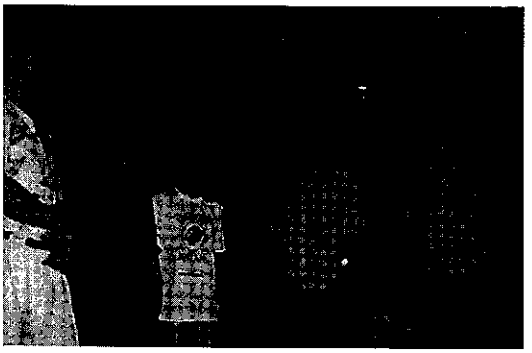
KSSP, according to M.P. Parameswaran, will lay stress on the strengthening of local bodies or "panchayats" in the next two years, with KSSP providing technical support services. Strengthening the local bodies, while developing and shaping a shared vision, is part of KSSP's dream of an alternative transnational coalition of peoples.

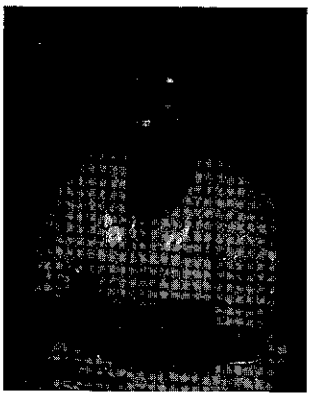
Clockwise from right: Welcome arc to the IRTC facilities; last minute preparations; opening ceremonies at Mundur; delegates doing self-introductions; HK-Chinese participants pose for a group photo; conference photo; traditional Keralan feast—eating on banana leaves.





Clockwise from top left: Street theater performance by the KSSP Team (first three photos); villagers during a procession; a rural village boy tends to his cow near Hydel plant; elephants as beasts of burden is a typical road scene; a Keralan artist paints the dormitory floor using colored powder.





Clockwise from top left: Dr. Z. Chowdhury and Michele Molina of the Philippineswith local villagers; Darunee Supawan, Pornpit Puadput, Chaweewan Khumpeng of Thailand; Chinese folk song rendered by Wang Hualian; delegates from Malaysia and Nepal; delegates in session; Rajeswori Shrestha of Nepal; a song number from the Japanese contingent.

List of Participants

BANGLADESH

[1] Dr. Zafrullah Chowdhury
Gonoshasthaya Kendra, Peoples Health Centre
P.O Nayarhat, Via Dhamrai, Dhaka, Bangladesh
Tel: 500720, 500406, 402245, Fax: 880-2-863567, 833182

HK / CHINA

[2] Ms. Lau Kin Chi
China Social Services and Development Research Centre (CSD)
Wanchai, P.O Box 23467, Hong Kong, Phone and Fax (852) 2865 1096

[3] Mr. Hui Shiu Lun
China Social Services and Development Research Centre (CSD)
Wanchai, P.O Box 23467, Hong Kong, Phone and Fax (852) 2865 1096

[4] Mr. Ku Hok Bun, CSD
China Social Services and Development Research Centre (CSD)
Wanchai, P.O Box 23467, Hong Kong, Phone and Fax (852) 2865 1096

[5] Ms. Remy Chui Siu Shan, CSD
China Social Services and Development Research Centre (CSD)
Wanchai, P.O Box 23467, Hong Kong, Phone and Fax (852) 2865 1096

[6] Ms. Xu Guolan
Jiangxi (China) Women's Credit Union, Yongxin Village,
Bai Shui Xiang, Wanzai County, Jiangxi Province, China, Tel: 86 7057 882461

[7] Ms. Wang Hualian
Jiangxi (China) Women's Credit Union, Yongxin Village,
Bai Shui Xiang, Wanzai County, Jiangxi Province, China
Tel: 86 7057 882461

[8] Ms. Wang Julan
Yongxin Village,
Bai Shui Xiang, Wanzai County, Jiangxi Province, China
Tel: 86 7057 882461

[9] Ms. Li Sujin
Jianxi Women's Federation of China, Nanchang, Ba yi Da Dao 145,
Jianxi, China
Tel: 86 791 6229553, 86 791 6275462 (res), Fax: 86 791 6229553

HONG KONG

[10] Mr. Ed Tadem
Coordinator
Asian Regional Exchange for New Alternatives (ARENA)
Flat B1, 2/F, Great George Building, 27 Paterson Street, Causeway Bay,
Hong Kong
Tel: (852) 2805 6193, 2805 6270, Fax: (852) 2504 2986

[11] Mr. James Joseph Keezhangatte
c/o ARENA

INDIA

[12] Ramakrishnan
Tamil Nadu Science Forum,
A-5 Quarters, Bharathiav University, Coimpatore, 641046, Tamil
Nadu, India

[13] Dinesh Kumar Abrol
Peoples Science Movement (AIPSN), 273, SFS, Hauz Khas, New Delhi-16
Tel: 68664670 (r) 5788113 (off.)

[14] K. Krishna Kumar
B.G.V.S., Rama Krishna Puram, New Delhi

[15] Mr. P.K. Ravindran
K.S.S.P., Surya Narakal, 682505, Kerala, India
Tel: 0484 492034

[16] Ms. Kalpana Sharma
The Hindu, Kasturi Building, J. Tata Road, Bombay 400020, India
Tel: 22 2022696, 22 202 1099, Fax: 22 202 5415

[17] Mr. Vinod Raina
EKLAVYA
E1/25, Arera Colony, Bhopal, 462016, India
Tel: 0755 563380, Fax: 0755 570321

[18] Ms. Urvashi Butalia
Kali For Women
B 26 Gulmohar Park, New Delhi 110049, India
Tel: 91 11 686497 6852530, Fax 91 11 6864497, 6866720

[19] Mr. Lawrence Surrendra
G-B, Blk. 1, Triveni Apts., Kuppam Beach Road, Thiruvanmiyur,
Madras 600 041
Tel.&Fax: 491-1898

[20] M.P. Parameswaran
KSSP-India, Arunima, Kottappuram, Trissur 680004. India
Tel.: 0487 26281

[21] Ms. U. Janaki Teacher
President, Kalliasseri Grama Panchayat, West Mangad, P.O., Kalliaseri,
Kannur
Kerala, India

[22] Mr. Komban Narayanan
Member of Kalliasseri Grama Panchayat, West Mangad, P.O.
Anchampeetika, Kannur
Kerala, India

[23] K. Balakrishnan
Kalliassery Development Society
West Managad, P.O. Kalliasery. Kannur, Kerala, India

[24] T.P. Sudhakaran
Kerala Sastra Sahitya Parishad, Mani Bavan, P.O. Muzhakkunnu Bazar
670673
Kerala, India, Tel.: 0497 500424

[25] T. Gangadharan
K.S.S.P.. Parishad Bhavan, Kannur, Kerala, 670 002, India
Tel.: 0497 500424

[26] Eddy Thomas
Indica Organic Plantations, Batlagundu, Tamil Nadu

INDONESIA

[27] Mr. Paulus Nong Susar
The Flores Welfare Foundation (SANRES), Jln. Kolo Mbeke-Nangalimang, PO Box 170, Maumere 86112, Flores. NTT, Indonesia
Fax: 62 383 221100

JAPAN

[28] Mr. Muto Ichiyo
PP21 Rural Urban Alternative, Sunrise Shinjuku Bldg. 3F, 2-4-15 Okubo Tokyo, Japan 169
Tel: 03 5273 8860 Fax: 03 5273 8667, E-mail: rua@twics.com

[29] Ms. Dessa Quesada
c/o RUA/JCNC

[30] Mr. Masaaki Ohashi
Keisen Jogakuen College, 1-1-1-1006 Saiwai, Ichikawa-City, Chiba 272-01 Japan
Tel./Fax: 0427 297276

[31] Ms. Yuko Niino
Shirata Food Processing Farmer's Collective, 3562-1, Yokotaziri, Shirataka-machi, Yamagata-ken, Japan
Tel.: 0238 85 0393, Fax: 0238 85 2213, 5998

[32] Ms. Megumi Kawasaki
Okitama Women's Network, 726 Oishizama Oguni-Machi, Nishi Okitama-gun, Yamagata-Ken, Japan
Tel. and Fax: 0238 65 2436

[33] Kumiko Magome
PARC/PP21 Japan, G-2-12-206, Asahi-Cho, Sokashi, Saitama-Ken, 340 Japan
Tel.: 001 81 258 33 3506

[34] Osamu Horie
Protest Farmers Niigata, 2-148 Hanazono Higashi Nagaoka City, Niigata Pref. Japan
Tel.: 001 81 258 33 3506

[35] Prof. Murai Yoshinori
Institute of Asian Cultures, Sophia University
7-1 Kioi-cho, Chiyoda-Ku, Tokyo 102
Tel.: 813 3238-3570, 8175 642 7967

KOREA

[36] Mr. Chung Sung Heon
Sung-Sani Dong, 572-122, Mapoku, Seoul, S. Korea

[37] Ms.Jung OK Lee
Garam Apt. 5-902, Sam Chun Dong, Daejeon, S. Korea, 303-222

MALAYSIA

[38] Ms. Mageswari A/P Sangaralingam
Consumers Association of Penang (CAP)
228, Jalan Macalister, 10400 Pulau Pinang, Malaysia
Tel.: 604 229 3612, Fax: 604 229 8106

NEPAL

[39] Dr. Gopi Upreti
Informal Service Sector Center (INSEC), NAECAN-Nepal
P.O. Box 5284, Kathmandu, Nepal
Tel: 977 1 477208, 422-430, Fax: 977 1 220 161

[40] Ms. Rajeswori Shrestha
Rural Reconstruction Nepal, Sankhuwa Sabha, Khandbari, Nepal
Tel: 418415

PHILIPPINES

[41] Ms. Jocelyn Tocama Sayam
Chairperson, KABABAYEN-AN (Women's Movement for Liberation)
COR. Princess Tarhata-Ma. Clara Roads, Tangub, Bacolod City, Negros Occidental
Philippines 6100

[42] Mr. Michele V. Molina
Negros Council for Peace and Development

[43] Mr. Alan Ben Hur Guzon
Deputy Secretary General, Democratic Association of Labour Organisations
Princess Tarhata-Ma. Clara Rds., Bacolod City, Negros Occidental, Philippines

SRI LANKA

[44] Mr. G.K. Upawansa,
Communiity Education Centre
Heinford, Dekinda, Nawalapitya, Sri Lanka
Fax: 94 (0) 542 250

[45] Ms. Amara (Gunawathie) Hewagallage,
Uva Wellasa Farmer Women's Organisation, Chandisima Vasa, Maligawila, Okkampitiya, Sri lanka

[46] Anita Fernando
Community Education Centre
117, Talahena, Malaba, Sri Lanka
Tel.: 941 866053, Fax: 941 867346/ 867439

THAILAND

[47] Ms. Darunee Supawan
Natural Farming and Action Research, Programme Coordinator
Rural Reconstruction Alumni and Friends Association (RRAFA)
67 Sukhumvit 55 Rd., Soi Thonglore 3., Bangkok 10110., Thailand
Tel.: (662) 7126442, Fax: (662) 3911771

[48] Ms. Chaweewan Khumpeng
c/o Local Community Development Project
Organic Vegetable group of Biam Panod, 11 Moo 5 9 Maetha Mae-orn
Sub-district Chiengma, Thailand 50130

[49] Ms. Pornpit Puadput
c/o Community Forest Project
48 Meo 4 Ban Donkean T. Bawkeaw, Nakoo Subdistrict of Kalasin
Province, Thailand