

OVERSEAS FIELDWORK REPORT 1995

Overseas Fieldwork Report 1995 :

**An Integrated Development Analysis
on the Province of Laguna in the Philippines**
A Case Study

March 1996

Graduate School of International Development
Nagoya University, Nagoya, Japan

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After a one day orientation session on the study framework of the OFW and guidelines for conducting the Modified Rapid Rural Appraisal (MRRA) within given time constraints, three-day MRRA's were conducted in various barangays (villages). The MRRA reports, which were presented by four intersectoral working groups at a formal discussion session, are not included in this report.

Introduction

This is our fourth report on the result of the Overseas Fieldwork which was conducted in Laguna Province in the Philippines (see Map 1) from September 20-October 19, 1995 (hereafter "OFW '95-PHI"). OFW '95-PHI was conducted under the academic exchange program between the Graduate School of International Development (GSID) of Nagoya University and the University of the Philippines at Los Baños (UPLB) following OFW '94-PHI which took place in Cavite Province.

This time, 25 graduate students (14 female and 11 male) participated in OFW '95-PHI which was designed as an integral part of our formal curricular activities (participants' names and itinerary are listed on page 3-4). The students were divided into the following four working groups (WG) based on their initial interests of field research:

WG-1: Economic development (agriculture and non-agriculture)

WG-2: Human resource development (education and health)

WG-3: Physical development (infrastructure and environmental protection)

WG-4: Institutional development (public administration and NGOs, POs).

In conducting actual fieldwork, the above four groups were subdivided into eight groups as indicated in parentheses.

After a one day orientation session on the study framework of the OFW and guidelines for conducting the Modified Rapid Rural Appraisal (MRRRA) within given time constraints, three-day MRRAs were conducted in various barangays (villages). The MRRRA reports, which were presented by four intersectoral working groups at a formal discussion session, are not included in this report.

The report contains four WG reports and my integration and overall assessments of OFW '95-PHI. Despite theoretical as well as practical difficulties in conducting the interdisciplinary analysis based on fieldwork under the limited time and unfamiliar environments, the WG reports are well-organized and presented. As I have mentioned in my overall assessments of OFW '95-PHI, however, the report contains some unrealistic proposals based on inadequate information and analysis on which we need to improve, incorporating your frank comments and suggestions.

Since Professor Haruo Nagamine, who initiated and directed the OFW project until his retirement last year, made detailed acknowledgement of those who were directly and indirectly involved in the project (please see the OFW Report 1994), I will not repeat here the lengthy acknowledgements. On behalf of the GSID, however, I would like to express my deepest appreciation for valuable inputs and guidance provided by our counterpart advisors at UPLB; Professors Constancia Z. Rosacia (Co-director of the Project), Nelson B. Querijero, Alvaro L. Soria, Romeo B. Obedoza, Jr. and Wilfredo B. Carada, Professor Obedoza, together with Professor Regelio V. Cuyno of UPLB, and Yutaka Ohama of Nihon-Fukushi University, also conducted the 10-day Intensive Lecture Course (ILC) at GSID prior to OFW '95-PHI. The painstaking efforts and kind assistance of UPLB graduate students are also cordially acknowledged.

I would also like to express my profound thanks to the number of collaborators and organizations, particularly the residents of various barangays, cooperatives, NGOs, various national, provincial and municipal government offices, Asian Development Bank, JICA and OECF Manila offices for their assistance and briefings which contributed to the successful completion of OFW '95-PHI.

In editing this report, I would like to acknowledge the enduring assistance of Dr. Mitsuhiro Tanimura.

Hiroshi Kakazu, Editor
Professor and Project Director
OFW '95-PHI

List of OFW '95-PHI Participants

GSID, Nagoya University, Nagoya

Table 1 GSID Faculty Members Participating OFW '95-PHI

Professor	Hiroshi Kakazu *	Adviser to	WG1	ISWG-B
Professor	Hirotsune Kimura	Adviser to	WG4	ISWG-C
Associate Professor	Yasushi Hiroساتو	Adviser to	WG2	ISWG-D
Research Associate	Mitsuhiro Tanimura	Adviser to	WG3	ISWG-A

*Project Director, OFW'95-PHI

Table 2 GSID Students Participating OFW '95-PHI

	<i>Student #</i>	<i>Name</i>	<i>F/M</i>	<i>Nationality</i>	<i>WG</i>	<i>ISWG</i>
1	95110	Ken Takaya	M	Japan	1a	A
2	95201	Takahiro Aoki	M	Japan	1a	B
3	95214	Keiji Hirano	M	Japan	1a	C
4	95104	Hiroko Kato	F	Japan	1b	D
5	95111	Yurie Tanimichi	F	Japan	1b	A
6	95123	Lu Yu	F	China	1b	B
7	955113	Masakazu Someya	M	Japan	1b	C
8	95101	Katsuaki Asakai	M	Japan	2a	A
9	95112	Supiga Chutivongse	F	Thailand	2a	B
10	95114	Yumiko Tsukakoshi	F	Japan	2a	C
11	95117	Toshiki Nakai	M	Japan	2a	D
12	95210	Sachiko Takahara	F	Japan	2b	D
13	95314	Makiko Tadokoro	F	Japan	2b	A
14	95105	Sachiko Kamo	F	Japan	3a	A
15	95120	Yoshiyuki Yamada	M	Japan	3a	B
16	95115	Kaori Toyoshima	F	Japan	3b	C
17	95211	Takahiro Tsuchiya	M	Japan	3b	D
18	95217	Suppakarn Pongyelar	F	Thailand	3b	B
19	95102	Andin Hadiyanto	M	Indonesia	4a	A
20	95121	Yang Hui Tzu	F	Taiwan	4a	B
21	95205	Amy Capman	F	U.S.A.	4a	C
22	95215	Tomoki Hirose	M	Japan	4a	D
23	95106	Etsuko Kawasaki	F	Japan	4b	C
24	95317	Yuko Hamada	F	Japan	4b	D
25	1	Hideaki Baba	M	Japan	4b	B

Working Groups

1a: Agriculture 1b: Non-Agriculture
 2a: Education 2b: Health
 3a: Environment 3b: Infrastructure
 4a: Development Administration 4b: NGOs

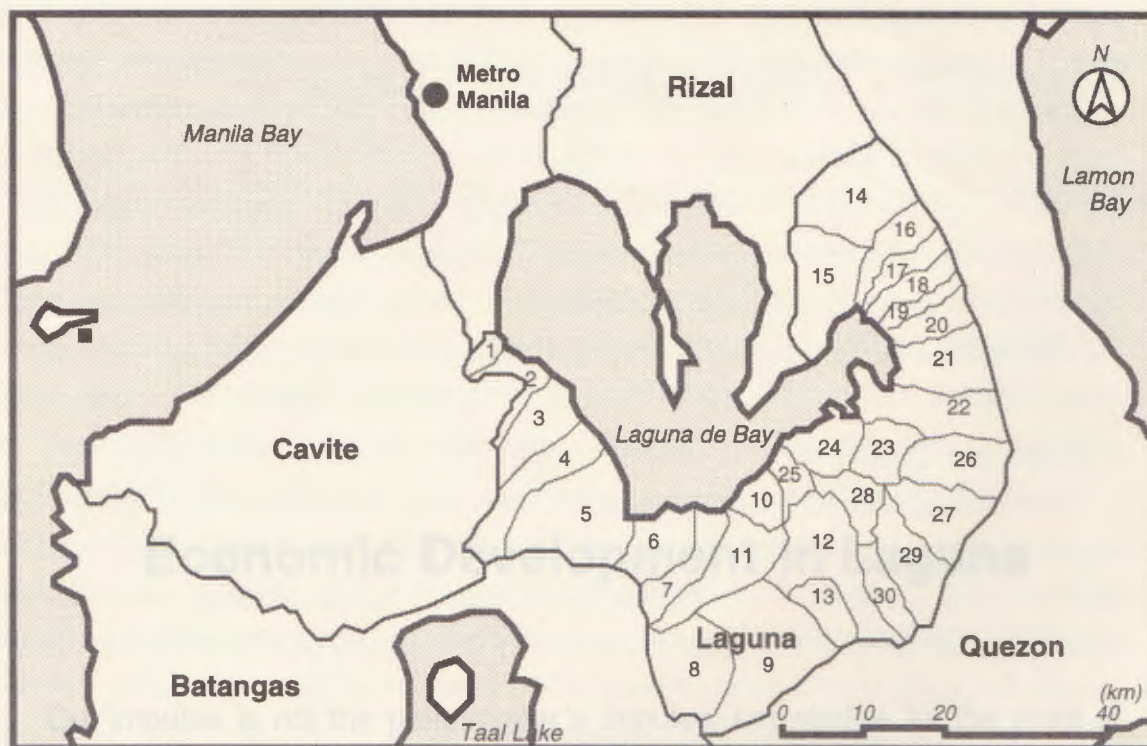
Inter-sectoral Working Groups

A: Macabbling
 B: San Benito
 C: Salangbato
 D: Coralan

Program of All Working Groups (OFW '95-PHI)

			A.M.	P.M.
September	21	Thu.	Nagoya	Manila (to Laguna)
	22	Fri.	Orientation: OFW & Rapid Rural Appraisal (RRA)	RRA: Evaluation of Collected Data Party (UPLB)
	23	Sat.	RRA: Interviews	RRA: Interviews
	24	Sun.	RRA: Interviews	RRA: Data Analysis
	25	Mon.	RRA: Data Analysis	RRA: Presentation
	26	Tue.	National Government Office: DTI Region IV	JICA/OECF Party (OECF)
	27	Wed.	<i>See Programs of Respective WGs</i>	
	28	Thu.	<i>See Programs of Respective WGs</i>	
	29	Fri.	<i>See Programs of Respective WGs</i>	
	30	Sat.	<i>See Programs of Respective WGs</i>	
October	1	Sun.	Day Off	
	2	Mon.	Provincial Government Office: Sectoral Briefings	
	3	Tue.	<i>See Programs of Respective WGs</i>	
	4	Wed.	<i>See Programs of Respective WGs</i>	
	5	Thu.	<i>See Programs of Respective WGs</i>	
	6	Fri.	<i>See Programs of Respective WGs</i>	
	7	Sat.	<i>See Programs of Respective WGs</i>	
	8	Sun.	Day Off	
	9	Mon.	<i>See Programs of Respective WGs</i>	
	10	Tue.	<i>See Programs of Respective WGs</i>	
	11	Wed.	Report Writing / Collection of Supplement Information	Report Writing / Collection of Supplement Information
	12	Thu.	Report Writing / Collection of Supplement Information	Report Writing / Collection of Supplement Information
	13	Fri.	Report Writing / Collection of Supplement Information	Report Writing / Collection of Supplement Information
	14	Sat.	Brainstorming for Integration (Rehearsal)	
	15	Sun.	Preparation for Integration (Project Director & Advisors); Day Off for UPLB staff	
	16	Mon.	Presentation	Presentation/Farewell Party
	17	Tue.	Leaving for Manila (Sightseeing)	
	18	Wed.	Manila (Day Off)	Manila (Day Off)
	19	Thu.	Manila	Nagoya

MAP 1. Laguna Province



■ City and Municipalities in Laguna Province

No. of Barangays and Population: 1980/1990

Municipality	Brgys	1980	1990	Municipality	Brgys	1980	1990
District I				District IV			
1.San Pedro	20	74552	156537	14.Santa Maria	25	15716	20514
2.Biñan	24	83428	134607	15.Mabitac	15	8543	11481
3.Santa Rosa	18	64284	95156	16.Famy	20	5238	7903
District II				17.Siniloan	20	11458	15250
4.Cabuyao	18	46273	67189	18.Pangil	8	6060	8799
5.Calamba	54		173426	19.Pakil	13	9041	13512
6.Los Baños	14	49322	66285	20.Paete	9	16381	20563
7.Bay	15	22964	32707	21.Kalayaan	3	10245	13114
District III				22.Lumban	16	17348	20040
8.Alaminos	15	20613	27434	23.Pagsanjan	16	19485	25187
9.San Pablo City	80	151571	186584	24.Santa Cruz	26	60494	76685
10.Victoria	9	16518	21984	25.Pila	17	20946	27608
11.Calauan	17	25248	32956	26.Cavinti	19	13075	15025
12.Nagcarlan	52	30630	37705	27.Luisiana	23	12194	14333
13.Rizal	11	14735	18679	28.Magdalena	24	10449	13507
				29.Majayjay	40	13696	15895
				30.Liliw	33	17434	21885

Source: Laguna Provincial Government

Working Group 1

Economic Development in Laguna

Our impulse is not the philosopher's impulse, knowledge for the sake of knowledge, but rather the physiologist's, knowledge for the healing that knowledge may help to bring. Wonder, Carlyle declared, is the beginning of philosophy. It is not wonder, but rather social enthusiasm which revolts from the sordidness of mean streets and the joylessness of withered lives, that is the beginning of economic science.

The Economics of Welfare by A.C. Pigou

Members

	Students#	Name	Nationality	WG
1	95104	Kato, Hiroko	Japan	1a
2	95201	Aoki, Takahiro	Japan	1a
3	95214	Hirano, Keiji	Japan	1a
4	95110	Takaya, Ken	Japan	1b
5	95111	Tanimichi, Yurie	Japan	1b
6	95123	Lu, Yu	China	1b
7	955113	Someya, Masakazu	Japan	1b

Working Group 1

Economic Development in Laguna¹⁾

1. Introduction

Purpose and Objective

The Philippines is being awakened from long term stagnation. With high export growth, \$13,433 (1994) up 19.2% from \$11,265 (1993), GDP growth marked 4.3% up from -0.6%(1991). Furthermore, the fiscal balance achieved 1.1% surplus for the first time in nineteen years owing to the autonomous revenue growth.

Laguna and the CALBARZON area, which form the industrial hinterland of Metro-Manila, are leading the nation's booming economy in many ways. For instance, the CALABARZON region accounted for 33.9% out of 145,513,000 jobs generated in the Philippines in 1994. Within the CALABARZON area, Laguna accounted for 12.5%. Although the economy is presently booming with the tail wind of the recovering international economy, there still remain such structural problems as heavy dependency of capital goods on imports or institutional weakness, which are holding back the Philippine economy. Therefore, the objective of this report is to identify structural problems facing the Philippine and Laguna economy by conducting fieldwork for each topic.

¹⁾ Our special thanks go to Prof. Hiroshi Kakazu for guiding us under academically adverse conditions. We are also deeply indebted to Prof. Tsunehiro Kimura for his insightful advice. Our debt also extends to many other professors in GSID, from whose comments we have benefited. We are very appreciative of the help given us throughout the research period by Dr. Romeo Obedoza, Prof. Nelson B. Querijero, Mr. Archimedes Ancheta, Ms. Edna O. Juta and many other staff of UPLB, without whom our research would have been impossible. Needless to say, none of the individuals named above is responsible for any shortcomings in this report. Our final thanks are extended to many Filipinos and Filipinas we met in the Philippines since it is their kindness that encouraged us towards the study. Moreover it is their own lives that really told us something and gave us the real picture of the Philippines.

Methodology

The research is divided into three main parts -industry, agriculture and society. Regarding the industrial section, the macro-picture and past industrial policies are reviewed in section 2.1. Section 2.2 discusses foreign direct investment (hereafter FDI), which seems to be functioning as an engine for industrial development of the Philippines. Subsequently, research on technology transfer (TT), which upgrades the industrial structure and improves the international competitiveness of the country, is presented in section 2.3. Economic development cannot be achieved by the urban sector alone independently of the rural sector. The rural sector has a substantial role for the rural poor, the majority of the population. Therefore, section 2.4, the final section on industry, reports on rural industries, particularly the handicraft industry in Paete.

The agricultural part comprises two sections. Section 3.1 discusses marketing and management issues which concern Laguna farmers. Agrarian issues are discussed in section 3.2. Issues regarding rice production, including the impact of HYV, are discussed in Section 3.3. Subsequently, social issues are discussed in section 4. Finally, integration of the research is made in the concluding section.

2. Non-agricultural Sector

2.1 Overview of the Philippine Economy

The Philippines was the earliest ASEAN country to begin industrialisation. The process was begun as soon as she attained independence, and the country enjoyed high GDP growth -- 7.2% on average in the 50s, 4.9% in the 60s, and 6.1% in the 70s. In fact, her GDP per capita was \$253 in 1960, which was still lower than \$345 of Taiwan and \$374 of Malaysia, but far higher than \$71 of Indonesia and \$176 of Thailand, and, surprisingly, slightly higher than \$234 of South Korea. However, budgetary and current account balance deteriorated under the Marcos presidency in the early 80s (Boxes 11 & 13) due to misused rather than over-active fiscal expenditure based upon foreign loans, and to inappropriate industrial policies. These policies favoured non-tradable goods, that is, capital intensive industries in the urban-modern

sector against tradable goods, that is, labour intensive products and agricultural products in the rural-traditional sector (Box 1).

Furthermore, the assassination of Senator Aquino plunged the whole nation into political turmoil. This not only discouraged foreign capital in-flows (Box. 15) but also encouraged capital flight away from the Philippines. Reflecting this chaotic political and business environment, foreign commercial banks became skeptical towards extending additional loans to the Philippines. This eventually triggered international financial unrest and plummeted the country into the so-called "debt crisis" in the early 1980s (Box 13).

However, under the IMF's initiative, a series of policies and an adjustment program to control aggregate demand, including appreciation of the peso, fiscal restraints and tax revenue increases, were launched as early as 1983. Owing to this comprehensive policy package, the Philippine economy underwent economic turbulence with two consecutive years of negative growth, -7.3 % and -7.3% and hyperinflation, 50.4% and 23.1% in 1984 and 1985 respectively.

The situation started to change when President Aquino was inaugurated in 1986 and initiated an economic reform program with trade liberalisation and privatisation of state enterprises, aiming at the reconstruction of the economy. With a tail wind of the recovery of the international economy, the Philippine economy, too, was gradually directed to its own recovery, facilitated by vigorous consumption demand and private investment.

The economic recovery did not continue long, for two reasons. Firstly, oil price appreciated as a result of the Gulf Crisis, and food prices appreciated as a result of natural disaster. Secondly, the B&P account deteriorated (Box 11) because of the import surge of capital and intermediate products (Box 10) coming from the powerful private domestic investment increase. The Philippine economy underwent recession again in 1991 with negative GDP growth of -0.6%. The stagnant situation of the Philippines in the 1980s can be attributed to several factors. Firstly, due to protective policies such as over-evaluation of the peso and tariff wall undertaken in the Marcos presidency, capital intensive industry was protected from the international competition at the expense of tradable (that is, labour intensive and

agricultural) products in which the country has a comparative advantage. (Box 2). The second reason lies in the institutional weakness of the country in terms of collecting taxes and utilising them effectively. In fact, it is said that one of the reasons for the Debt Crisis was the government's limited capacity to efficiently use foreign loans.

Macroeconomic indicators and the business climate began to show progressively better performance in 1992 soon after the political situation was stabilised under the Ramos presidency. Economic growth marked 4.3% in 1994, up from -0.6% in 1991. Inflation fell from 18.7% (1991) to 9.0% (1994). The budgetary position achieved surplus, 1.1% to GDP for the first time in nineteen years. Amongst those indicators showing good performance, FDI in-flows into the Philippines have shown remarkable growth, from \$285.4 million in 1992, up to \$569.3 million in 1993 (approximately 100% increase) and up to \$2,455.9 million in 1994 (331.3% increase).

It seems that because of enormous FDI in-flows, exports soared, resulting in high GDP growth, which moreover contributed to tax revenue increase and ameliorated the budgetary position. It has still been a short time since FDI in-flows started booming. Therefore, it is still very problematic to say that FDI is contributing to industrial up-grading. However, it is clear that the Philippines is being directed towards economic expansion.

2.2 Foreign Direct Investment (FDI)

Policy and Trends

Many new policies have been adopted to attract foreign investment to the Philippines. More areas have been opened to 100 percent foreign ownership. Last year, investment soared to 392 percent of that of 1993²⁾. From January to August this year, P226 billion worth of investments have already poured into the country, exceeding 13% of investment during the same period last year (Board of Investment: BOI). Electronics receive the highest priority in investment targets. Facilities including Export Processing Zones or Industrial Estates, and Special Economic Free Zones enable enterprises to start operations.

²⁾ From P92.5 bln in 1993 to P454.8 bln in 1994.

To activate competition amongst provinces in attracting foreign investors and thus promote local development, it is anticipated that the pace of decentralization will be accelerated.

FDI in Laguna

Laguna is the nation's centre for economic activity. Because of the low wage rates, abundant English speaking workforce, and business incentives on a provincial level, P8,902 million worth of investments poured into Laguna in 1994, creating 18,162 jobs, or 12.48 % of the whole nation's employment.³⁾ Currently, five private industrial estates are operating. They are developed and managed by a joint venture of local and foreign partners. Four of these industrial estates have Special Export Processing Zones. Among the investments registered for the first nine months this year, the largest investment, amounting to P4.93 billion, went to the Camelray Industrial Park in Laguna.

Despite incentive policies such as tax holidays, foreign investors appear to be more concerned about problems relating to infrastructure, traffic and high cost of electricity (Box 14). Because of both poor tax collection and the high debt service ratio (Boxes 11 & 13), a sufficient portion of the budget cannot be allocated for investment on infrastructure. Although P15.6 billion worth of build-operate-transfer (BOT) investments has been poured into the infrastructure, the government should continue to encourage more BOT projects, especially BOT with foreign investment. The high energy cost is also another major component that the government needs to address, since it is becoming a crucial competitive issue for the nation in the eyes of foreign investors. The government needs to solve these problems to gain sustainable growth and to capture investors' interest.

Another problem is the underdevelopment of local supporting industries (Box 9). Caused by slow commercialization and diffusion of technology and low domestic investment in local industry, this underdevelopment means that industrial estates are enclaves. For example, a Japanese factory which is producing wire harness in Laguna Industrial Park, imports all parts from Japan, which requires high costs and at least one month's shipping. Endowed

³⁾ Laguna's population ratio: 2%.

with abundant copper resources, the Philippines should set up local industry to meet mutual interests. Appropriate policies are needed to support more research and development (R&D) and encourage small and medium enterprises (SMEs).

2.3 Technology Transfer to SMEs

Local Technology

For SMEs in Laguna, the Department of Science and Technology (DOST) regional office (San Pablo City, Laguna) plays a significant role as the main mediator for technology transfer (TT). It is responsible for the diffusion of technology from DOST R&D institutes like ITDI (Industrial Technology Development Institute) and MIRDC (Metals Industry Research and Development Center) as well as to provide consultancy for mainly domestic but to some extent foreign technologies from the private sector. Since in the Philippines the government sector accounts for 80% of expenditure for R&D, compared to developed countries where the private sector accounts for 70% of expenditure for R&D⁴⁾, the technology from DOST R&D institutes constitutes a major portion of local technologies (Box 19).

Some recent accomplishments of the DOST regional office are the diffusion of technologies such as low cost laundry soap, instant cassava grates, ceramics production, and semiprecious gem processing. The procedure of technology diffusion is explained below using the semiprecious gem processing as an example. First, a new gem processing machine was developed by MIRDC, a DOST metal R&D institute. Brochures introducing this new machine were prepared and distributed by the DOST regional office. Collaborating with Bureau of Mines of DENR (Department of Environment and Natural Resources), they scanned the region for possible recipients of this new technology. After finding a candidate in Mabitac, DENR Bureau of Mines conducted a feasibility study. As it was proven economically and technically feasible, free blueprints of the machine were handed out accompanied by the necessary training.

The diffused technology mentioned above employs unsophisticated and

⁴⁾ UNESCO Statistical Yearbook, as cited in Villaverde, A.S. Management of Research-Technology Transfer Linkage: The Case of the DOST Technology Business Incubator (1995)

low level technology. However, these basic technologies are used on local materials as in the case of the low cost laundry soap where copra is used. This approach of utilizing local materials heightens the accessibility and feasibility of new technologies to local SMEs and thus should be further pursued.

For SMEs with little capital and few human resources, it is difficult to acquire technology on a purely commercial basis from private sectors. So currently TT to SMEs is greatly dependent on DOST institutes. There is a need for an increase in agents in R&D, commercialization, and diffusion (box.19). For maximum effects, the private sector and higher education institutes should play a more active role in TT to lessen the concentration of TT activities in government agencies. For example, organizations such as business associations should take more initiative as they are expected to have a better business sense than government agencies. This is especially crucial for SMEs as they generally do not possess their own sufficient channels to new technologies. SMEs should consider organizing business associations among themselves to act as an entry point for new technologies.

Foreign Technology

Although Laguna is becoming a major recipient of foreign investment, the local content rate in FDI is low due to underdeveloped supporting industries (Box 9). Therefore TT from FDI to local industry is still minimal at this stage (Box 16).

On the other hand, most local industries especially SMEs lack the necessary resources to acquire Technology Transfer Arrangements (TTAs), such as licensing and marketing/distributorship agreements. It has been found that a great portion of the 101 TTAs concluded in 1993 between domestic and foreign companies was actually between the parent company and its subsidiaries, such as in the case of TTAs between Honda Motor Co. Ltd. and Honda Phils. Inc. or between General Electric Co. and General Electric Phils. Inc⁵⁾.

So the utilization of foreign technology can be widely seen in FDIs and

⁵⁾ Technology Transfer Registry of the Bureau of Patents, Trademarks & Technology Transfer of DTI

local subsidiaries, but at this stage foreign technology is not a major contributor to local industries as a generator for productivity improvement (Box 18).

Although the public sector plays an active role in transferring local technologies, it performs poorly with foreign technologies. It has retained its position as a mere consultant to those private firms acquiring foreign technologies by their own initiatives. Transfer of foreign technology should be given a higher priority over development of local technology when it is more economical and technically appropriate. Foreign TT requires only minimal domestic R&D expenditures compared to developing new technologies locally and also, there is already a large pool of technology which can be tapped for the development of local industries. The main consideration should be on establishing sufficient channels, which is currently lacking, to be able to secure the appropriate technology to match the needs of local industries.

2.4 Handicraft Industry

On the whole, the traditional handicraft industry is labor intensive, which can contribute to local employment generation. And even if the economy becomes fully developed, the industry can survive and even flourish, as has been demonstrated in already developed countries. The municipality of Paete depends largely upon its handicrafts, particularly woodcarving, but it has the potential to develop much more, if the problems facing the local industry are solved.

3. Agricultural Sector

Paete is an agricultural area located on the east coast of Laguna de Bay. Developing Paete would stem the flow of laborers moving to the industrializing west side. If the income in the handicraft businesses increases, it will contribute to raising the income of the local agricultural sector through demand for agricultural products. Further, the handicraft business contributes to Paete's high employment rate because it is dominated by labor-intensive cottage scale factories⁶⁾.

⁶⁾ According to the municipal office, half of the employment on Paete is created by the handicraft industries.

Securing Raw Materials

The most serious problem confronting Paete's wood carvers is the scarcity of wood (Box 24). The total logging ban imposed by the central government due to severe deforestation has reduced the supply of wood, doubling or even tripling the price of wood⁷⁾ (Box 23). Because forest denudation in Laguna is serious, the wood is brought from nearby provinces, mainly Quezon. In addition to deforestation, the merchandising and transportation system also raises wood prices (Box 22).

Wood carvers have been advised to convert from wood products into taka⁸⁾ products by the provincial government due to the short supply of wood. As a result, oversupply of taka has occurred. Consequently, re-conversion of taka to wood carving is now happening. The municipal office has set up several plans for the securing of wood instead of supporting the conversion. These plans include a communal forest program⁹⁾, a request for the exemption from the total logging ban, and so on.

Production and Design

Wood carvers can be classified into two types. One is an artisan who makes relatively simple wood carvings or who works for a big factory which adopts a division of labor. The other is an artist who makes elaborate articles. Generally the artisan produces only a limited number of products, such as animals and necessities, but the artist makes quite a few, sometimes by order, or from their imagination, often with reference to the Bible, Philippine legends or natural scenery.

Since there is no formal training available, people learn how to carve from experience.

Marketing

Approximately 20% of total output is sold locally, mainly to tourists in

⁷⁾ 100%-200% increase in past 5 years from 1990.

⁸⁾ Paper mache--First step in making taka is carving a wooden mold in a desired shape. The wet (with flour water) scrap of paper, several layers, are pasted on the mold and left to dry. When the paper bulk is dry, it is cut in half, removed, then reassembled with glue. Then, finally it is painted.

⁹⁾ Replanting of 34 hectares of communal forest will start in February 1996, and trees can be harvested within 5 to 7 years.

Paete. The remaining 80% is sold outside Paete. The products are exported to other places in the Philippines and to foreign countries such as the U.S., Europe and Japan¹⁰⁾. Since the woodcarving industry in Paete is highly dependent on exports¹¹⁾, they must take the rival producer countries such as the other Asian producers into consideration. Therefore, manufacturers cannot increase wholesale prices as much as material costs increase (Box 25).

The municipal office promotes direct exports, which means exclusion of middlemen. Generally, only big manufacturers trade with foreign buyers. On the other hand, small manufacturers have to depend on middlemen, because output is too small to transport independently. It is the middlemen who organize transportation and find foreign buyers¹²⁾ (Box 24).

Supporting Organizations

There was no organization to effectively promote wood carving industry until Paete Chamber of Commerce and Industry (PCCI) was established in 1994. Because it is just a year since PCCI was established, it has not yet developed the authority to influence manufacturers, particularly small ones.

The municipal office with PCCI plans to set up a trade center, which will be used not only for transactions but for other purposes, for example, exhibitions and skill training¹³⁾.

3. Agricultural Sector

3.1 Rice Production

In Laguna, High Yielding Varieties (HYV) started to be introduced in 1965. Since the International Rice Research Institute (IRRI) and College of Agriculture UPLB, both located in Laguna, are leaders in the development of new varieties of rice, the introduction of HYV was earlier than in other

¹⁰⁾ Information according to the secretary of mayor of Paete.

¹¹⁾ Export is used as a word which include both domestic and foreign export.

¹²⁾ In my research, only one manufacturer, which has two factories and around 300 workers, did a direct export. But the other smaller manufacturers (1-30 employees) exported through middlemen.

¹³⁾ Information according to the president of PCCI.

provinces. At that time, HYV was not considered feasible among the farmers. But the influence of agricultural technicians made HYV spread rapidly. The per hectare yield before the introduction of HYV was 1.7 metric tons, but had increased to more than 4.0 metric tons in 1990. Some farmers' per hectare yield is 6 metric tons in dry seasons.

As it is widely recognized, new inputs - fertilizers, pesticides and sufficient supply of water - are required in order to make the most of HYV. That is why irrigation systems were constructed by the National Irrigation Administration (NIA) and by some communities with the spread of HYV.

By increasing the number of irrigation systems, double-cropping has become a commonly used method. However since actual field conditions for HYV cultivation were different than in the laboratories, rice production did not increase as much as the agricultural technicians predicted. The reasons in detail are as follows:

Insufficient Use of Pesticides

In the early years after introduction, HYV especially IR8, called "miracle rice", did not have strong resistance to pests and viruses. Once pests and viruses proliferate, so does the damage to yield (Box 42). In order to prevent the increase of pests and viruses, farmers had to use pesticide (Box 43). The price for this is high. The HYV of the 1990s has stronger resistance than IR8. However, the usage of pesticide is still essential (Box 38).

In Laguna, the biggest pest problem is the increase of golden snails, which eat away rice seedlings.

Insufficient Use of Fertilizers

Most farmers use chemical fertilizers. Although fertilizer is crucial in order to capitalize on the characteristics of HYV, their cost is high (Box 38). For this reason, farmers cannot invest in adequate fertilizers to achieve high yield (Box 35).

Poor Irrigation Management

The ratio between irrigated and non-irrigated area in Laguna is nine to one. This figure is high relative to other provinces. But due to the poor

irrigation systems, water supply cannot be adequately controlled in dry seasons (Box 34). Therefore, the irrigated area actually available for the production is not accurately reflected in the statistics. The large yield gap between irrigated and non-irrigated area leads to approximately double yield for irrigated area. This gap is relatively large compared with other regions.

Insufficient Post Harvest Facilities

It is generally said in Japan that with the Green Revolution the introduction of agricultural machines has advanced. However, it seems that the number of farmers who own machines is still very low. For example, very few people have mechanical dryers. As they are expensive, small scale farmers cannot buy them. Also the number of cooperatives or communities which own them is still limited. For these reasons, most farmers dry their rice on the road where tricycles pass over them, thereby destroying the quality of the rice.

Rice produced during wet season cannot be fully dried due to the lack of drying facilities. Thus, this rice has higher moisture content, which lowers grain quality and results in low farm gate price.

3.2 Agrarian Aspects

Sporadic Agricultural Extension Service

Due to inadequate government extension, farmers who grow HYV are not taught proper methods of HYV cultivation. Without such instruction (Box 20), they are unable to attain the full benefits of HYV uptake, thus creating a barrier to high yield rice production.

With regard to other crops, the Center for Rural Technology Development (CRTD) and UPLB are major contributors to dissemination of new technology. They emphasize the implementation of their projects within the context of local resources, priorities and feasibility. These institutions often meet financial difficulties, however. After devolution in 1993, many agricultural technicians from the Department of Agriculture (DA) became Local Government Unit employees. This move, however, failed to improve the provision of effective extension services, contributing to inadequate farm management, which in turn lead to higher incidence of pests and plant disease. Furthermore, few farmers engage in crop diversification, which contributes to sustainable cultivation.

Inaccessibility to Formal Credit

Thanks to legislative measures, there would not appear to be a shortage of capital in rural areas¹⁴⁾. However, it is still difficult for small farmers to obtain access to formal credit. Because loans from credit agencies such as the Land Bank and the rural banks require not only strict conditions but also tedious processing, farmers are often discouraged from applying. The Agricultural Credit Policy Council (ACPC) controls the provision of credit projects for small farmers to invest in post harvest facilities and farm inputs. However, so far this province has benefited little from these projects.

3.3 Marketing Aspects

Unless the marketing system functions properly, farmers cannot reap the profits of increased productivity. The investment required to ensure the efficient operation of the marketing system is so huge that individual farmers cannot afford it. Therefore it is necessary for cooperatives and Government organizations to provide farmers with marketing services. The leadership of a number of cooperatives have recognized marketing as crucial but their marketing capability is insufficiently developed.¹⁵⁾ This indeed explains the persistence of middlemen in the retailing of farm produce.¹⁶⁾ Some fundamental factors related to the inefficient marketing system are discussed below.

Insufficient Infrastructure

Farm-to-market roads are generally poor and the means of transportation is small vehicles. Thus, when there is a good harvest, it is difficult to transport more products to market. Further this may result in depressed rural prices¹⁷⁾. Concerning the communication system, farmers have extremely limited access to telecommunication facilities. This is a great disadvantage to farmers since time is a crucial factor in marketing agricultural products, especially

¹⁴⁾ The Agri Agra Law has mandated the allocation of 25% of the bank's total loanable funds to the agricultural sector. Thus there were about P212 billion available funds in 1993.

¹⁵⁾ For example, Staff of the San Benito Multi-purpose Cooperative explained that they lacked marketing information on the prices of watermelon and had to contract unilaterally with foreign buyers.

¹⁶⁾ However, it will be more costly to exclude middlemen from the marketing process under the present conditions. (Agnes R. Chupungco, 1992)

¹⁷⁾ We recognized the production of india-mango as feasible to increase farmers' income in Sta. Maria. The mayor, however, was afraid of price depression due to overproduction, because the market is very localised.

perishables.

Insufficient Post Harvest Facilities

As mentioned earlier, because of a lack of drying and storage facilities most farmers sell low grade products to middlemen at harvest time, when prices are lower than average. Even with post harvest facilities, many products are lost due to improper storage and transportation¹⁸⁾.

Ineffective Government in Extending Marketing Services

Though the National Food Authority (NFA) is in charge of all aspects of marketing in the agricultural sector, due to its budgetary constraint it can not influence farm prices. It can handle only 5 % of rice trade and is thus unable to maintain sufficient buffer stocks¹⁹⁾. While there are 5 NFA buying stations in Laguna they are not integrated properly.

Inactive Cooperatives

The marketing capability of cooperatives is generally fragile. Most cooperatives lack post harvest facilities, much less the ability to collaborate with other cooperatives. Some organizations are, however, striving to establish an inter-coop distribution network or integrated market center²⁰⁾. According to the Philippine Medium-Term Cooperative Development Plan for 1993 to 1998, the Cooperative Development Authority (CDA) is detailed to encourage cooperatives to construct inter-cooperative networks and post harvest facilities. It is doubtful, however, whether these projects are being implemented properly.

4. Social Aspects

4.1 Influence of Surplus Labor

In the Philippines the number of industrial workers reached 4,115,000 in

¹⁸⁾ According to research by Yorobe, the loss in palay due to poor and inefficient post production is about 10 to 37% of total harvest.

¹⁹⁾ To be effective, the support price mechanism must be implemented for as much for as 12% or between 10 and 20% of the amount needed to be procured.

²⁰⁾ The National Confederation of Cooperatives (NATCCO) is promoting intercoop trade to enable producers and consumers to meet for direct commercial exchange.

1995. According to the latest statistics, the percentage of men and women is 16.7% and 14.2% respectively in the industrial sector. On the other hand, unemployment rates increased in seven regions, especially in Laguna which is a part of Region IV, Southern Tagalog, as can be seen by the change of unemployment rates from 8.7% to 9.2%. The increase of unemployment means surplus labour, leading to (1) increase of contract workers (2) flow of workers to Agro-industry and (3) seasonal employment.

Moreover surplus labour leads to intensified competition between workers in seeking jobs. This situation gives employers an advantage over employees concerning working conditions (Box 44).

4.2 Case Study: Working Conditions in Instafood Inc.

Instafood Corporation of the Philippine is a wholly-owned subsidiary of San Miguel. This case study on Instafood focuses on labour conditions on an assembly line.

In Instafood there are two plants. Plant I manufactures instant foods such as chicken curry, pork & beans, and Plant II produces Nata de Coco. The whole process of Plant I is 1) preparation 2) blanching 3) cooking 4) filling 5) sealing 6) cooking. In this process, assembly line is from 1) to 4). Male/Female ratio for each section is given as follows 1) male 5% female 15% 2) m 10% f 0% 3) m 5% f 5% 4) m 5% f 30%. Total percentage between male and female is male 25% female 50% in the assembly line.

For Plant II the process is 1) dicing 2) soaking 3) sorting 4) boiling 5) filling 6) sealing 7) cooking. Assembly process is from 1) to 6). As regards to manpower in each section 1) male 8% female 2% 2) m 4% f 1% 3) m 5% f 35% 4) m 5% f 5% 5) m 3% f 17% 6) m 7% f 3%. Total percentage between male and female is male 32% female 63% in the assembly line. Derived from this situation is that more women are engaged in the assembly line than men in Instafood.

Moreover concerning other working conditions, most of workers in assembly lines of both plants are temporary workers. One reason for this is almost all of the workers are high school graduates and college drop outs. Therefore there are unlikely to be promoted in the company.

In the assembly line, 15 workers are engaged under 1 leader. 90% of the leaders are male, the remaining 10% being female. This may be due to the fact that employers think women are docile, patient, and possess hand dexterity. In short, women face more hardships than men in obtaining promotion.

According to collected data the workers hope their wage will go up. The reason why promotion is important is because after promotion workers can obtain more money. However in Instafood there is no promotion examination. It is up to their supervisor's judgement. Because of this, assembly line workers are rarely promoted. So a more transparent and objective system of skill education and preferably a fixed examination should be introduced to increase promotion opportunities for assembly line workers (Box 44).

5. Integration and Conclusion

In this final part of the research, we would like to integrate all of the aspects presented hitherto, i.e., the macro-economic aspect, the industrial aspect, (divided into three sections - foreign direct investment, technology transfer and rural industry), the agricultural sector (also divided into three sections - marketing, agrarian and managerial aspects and rice production), and social aspects. Although each section of the research may seem independent, all of them formulate the Laguna economy, and therefore are interrelated in many ways.

Employment Linkage

Firstly, in accordance with A. Lewis' "Unlimited Supply of Labour" theory, despite recovering economic growth (at 4.3% for 1994), there is a surplus of labour in the western part of Laguna, which is a relatively developed area, as well as in the eastern part of Laguna, which is being developed under the CALABARZON plan initiated by the government. The mechanism behind this, i.e., high unemployment rates are observed both in rural and relatively developed areas, is attributed to the fact that foreign transnational corporations operating inside EPZ and industrial estates are not absorbing as much labour as they were expected to. It was hoped that such foreign investment would

achieve significant unemployment reduction through smooth sectoral labour flows. The reasons for this disappointing inelasticity of labour to GDP growth are as follows;

a) Because foreign firms tend to employ capital intensive and labour saving technology, their effect on employment seem to be low in proportion to the size of investment.

b) Because their operation period in the Philippines is still short,²¹⁾ localisation has not progressed much yet. In fact, many TNCs are still importing all parts and materials and exporting them to the foreign markets as reported in section 2.2. Consequently, the impact of FDI upon local industries is still considered to be small.

On the other hand, it is pointed out that SMFs which use relatively labour-intensive technology have a larger impact upon the local labour markets than big transnationals.

One implication derived from the analysis above in terms of labour flow linkages is the role of rural industry discussed in 2.4, which are generally located in rural areas and use labour intensive technology. According to the case study on handicraft industry conducted in Paete, it seems that the handicraft industry is contributing to the rural economy by absorbing labour surplus in rural areas as well as to the urban economy in that it contains internal migration, thus mitigating rapid urbanisation.

The second implication in terms of employment generation is the role of agro-industry in rural development of Laguna. Although some agro-processing firms are located in industrial estates, they have a significant impact upon the Laguna economy. In many cases, the technology used in agro-processing industries is labour-intensive. In addition, agro-industry offers off-farm incomes to farmers, which could reduce fluctuations in farmers' income.

The third implication is that due to surplus of labour supply, bargaining on

²¹⁾ FDI in-flows started booming in 1992. Furthermore, most of EPZs and industrial estates were formulated in the 1990's.

labour conditions is likely to be dominated by employers, which is detrimental to the labourers' welfare, as argued in section 4.

Market Linkage

It is often said that agriculture plays significant roles in the early stage of development. One of them is called "market contribution". That is to say, generally in developing countries, the demand for manufactured products is not very vigorous in urban areas since the level of income is not very high. Furthermore, most of the population in developing countries live in rural areas. Roughly assuming that the market size is defined as the number of population multiplied by the level of income per capita, the rural area has a critical role as a market for manufactured products, which are still not very competitive internationally.

In this sense, the income level of the rural area where majority of dwellers are engaged in agriculture could play a substantial role for industrialisation. The income level of the western part of Laguna is relatively high in comparison with other provinces due to overseas remittances and citrus production.²²⁾ Thus, it appears that the western part of Laguna is contributing to the development of the industrial sector by functioning as a market for products manufactured in the eastern part of the province.

On the other hand, the industrial sector contributes to the rural agricultural sector in two ways. It is often pointed out that the food processing industry accounts for approximately 40% of total value-added in the Philippine industrial sector²³⁾. It is presumed that a large share of outputs in the agricultural sector is absorbed in the industrial sector. In this fashion, the industrial sector contributes to the agricultural sector. Conversely, low productivity in the agricultural sector has a detrimental impact on the industrial sector.

Secondly, it can be said that development of the industrial sector contributes to the rural agricultural sector through reducing costs for farm inputs such as tractors and chemical fertilizers owing to a productivity increase

²²⁾ However, it is assumed that the level of income in the Western part of Laguna has been declining recently due to a decreasing level of citrus production because of virus.

²³⁾ Y. Sakakibara 1994

in the modern industrial sector. Conversely, low productivity in the industrial sector imposes relatively high costs upon the farmers through high agricultural input prices.

One implication derived from the picture above in terms of market linkage lies again in the rural agro-industry. That is to say, those inputs used in rural agro-industry are purchased from the local market, namely, the rural agri-market, which can improve the income of farmers.

Capital Linkage

The third linkage between the urban modern sector and rural agricultural sector lies in the sectoral flows of capital. As mentioned earlier in this report, a majority of the population in the Philippines lives in the rural areas and is engaged in agricultural production. In other words, a large share of the nation's capital is derived from the agricultural sector.²⁴⁾ In this respect, the low level of capital formation owing to low level of saving ratio can be attributed to the low level of income in the agricultural sector. One implication drawn from this is that raising the income level of farmers is one of the most effective ways to improve the nation's saving ratio as well as to ameliorate B&P position.

Concluding Remarks

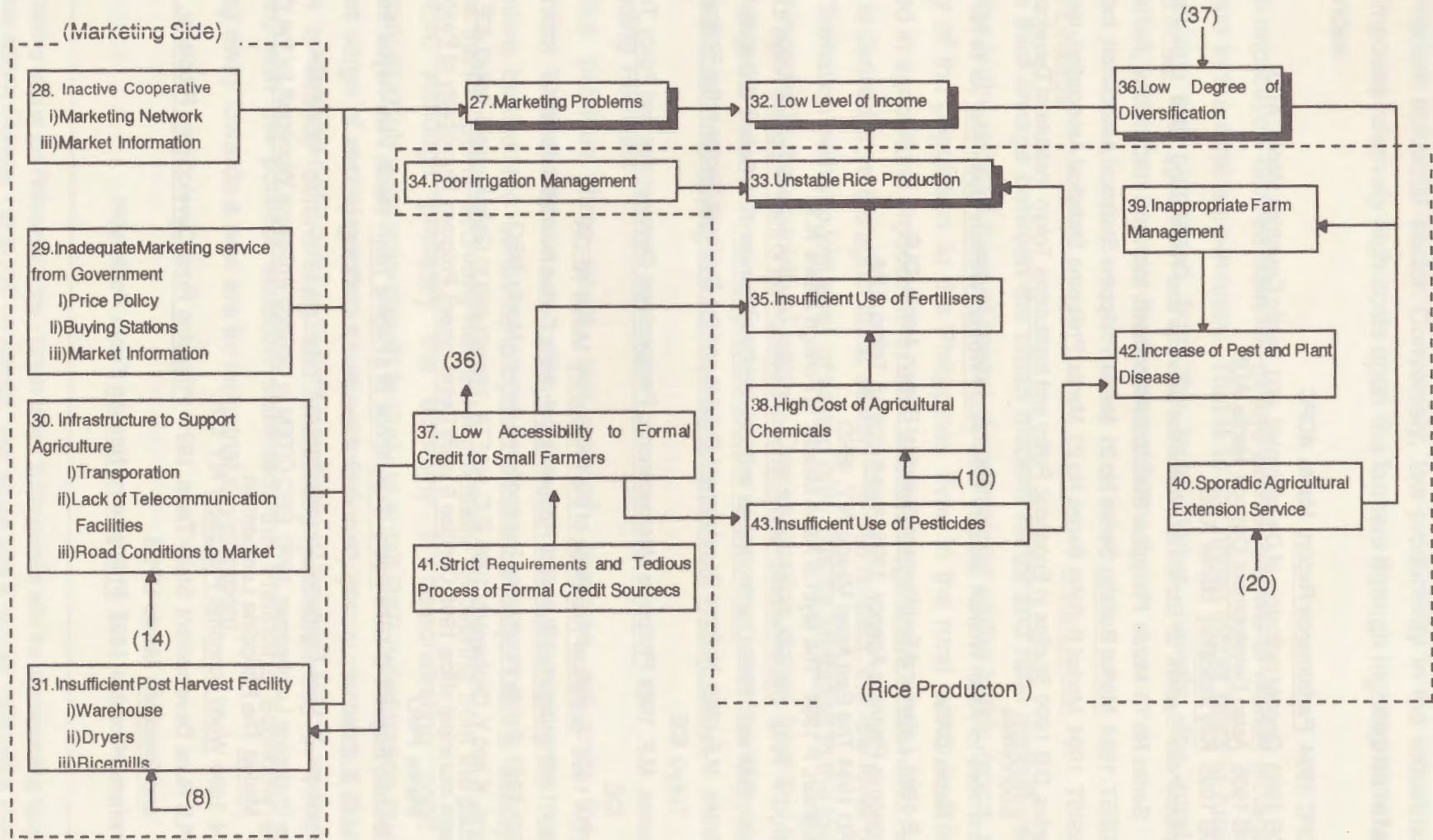
Unlike previous three years, our research analyses not only the mechanism behind the vicious cycle of poverty but also highlights the mechanism behind the benevolent cycle of the economy. This is simply because the Philippine economy has been gradually recovering from the past stagnation. Although presently the economy is demonstrating good performances, high economic growth is likely to entail B&P deterioration due to import surge of capital goods as well as inflationary pressure. In fact, B&P position is already deteriorating and inflationary pressure rose in 1994. However, with the political situation stabilised, the Philippine economy is breaking away towards a new era for industrial development.

²⁴⁾ The saving ratio of the Philippines is low - 15% in 1994 - in comparison with the corresponding figure for the other ASEAN countries - 25 to 30% on average. High saving ratio is normally observed in many countries in the take-off period.

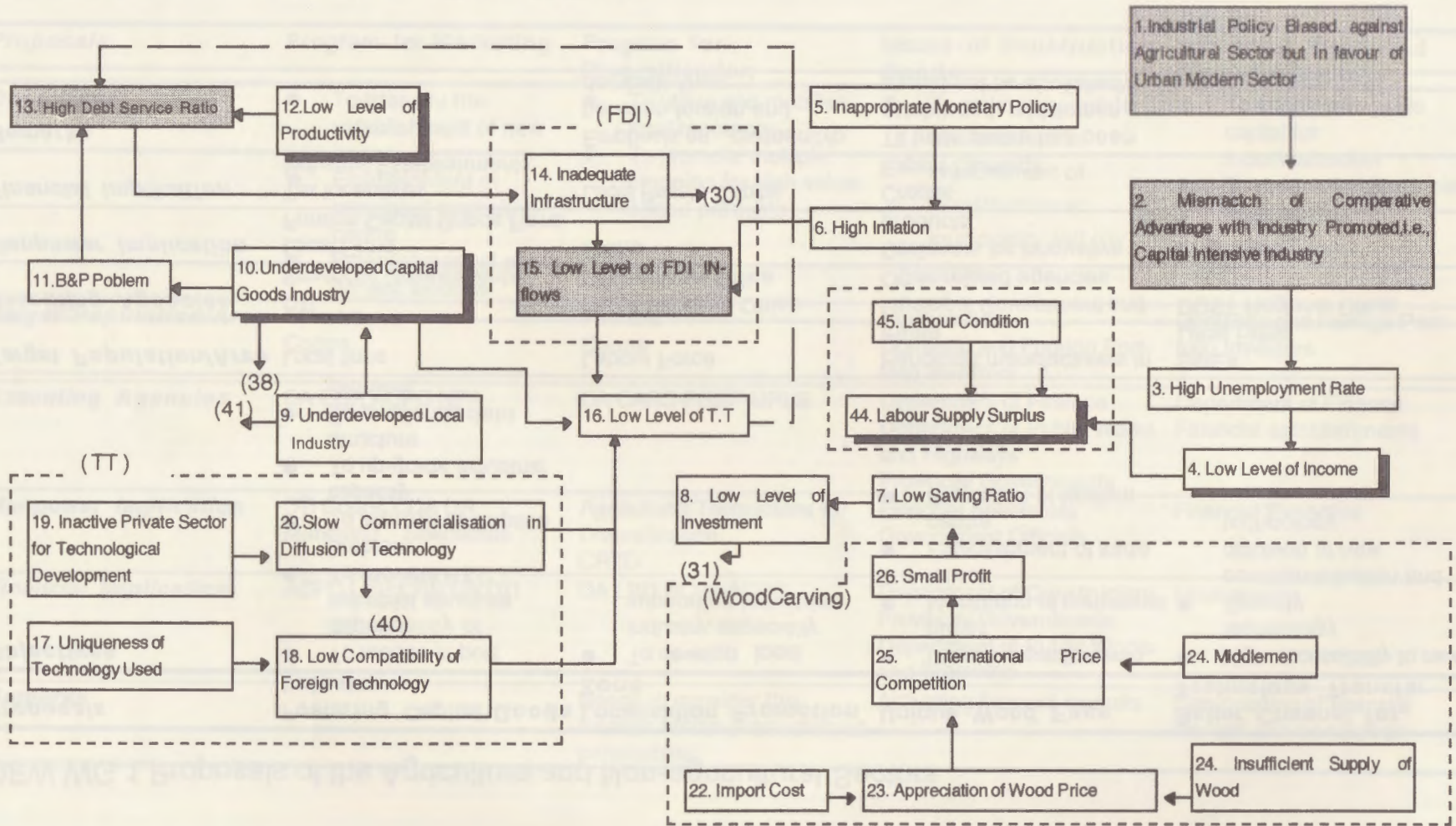
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Problem Structure Diagram:OFW.WG 1.a



Problem Structure Diagram:OFW.WG 1.b



OFW.WG 1.Proposals of the Agriculture and Non-agricultural Sectors

Proposals	Fostering Capital Goods Industry	Localisation Promotion Zone	Unique Wood Face	Better Channel for Technology Transfer
Objectives	<ul style="list-style-type: none"> ● To reduce import dependency of industrial structure ● To alleviate B&P problem ● To improve absorptive capacity ● To up-grade industrial structure ● To ameliorate debt problem 	<ul style="list-style-type: none"> ● To develop local industry, especially supporting industries. 	<ul style="list-style-type: none"> ● Direct transaction with buyer ● Monitoring of communal forest ● Establishment of trade centre ● Promotion of tourism 	<ul style="list-style-type: none"> ● High accessibility to new technology ● Speedy commercialisation and diffusion of new technology
Target Population/Area	Local firms	Labour Force	Handicraft manufacturers in Paete	SMEs Local Firms
Executing Agencies	DTI Provincial Governments	PEZA Regional Office DTI Regional Office	Municipal Government and Other related agencies	DOST Regional Office
Manpower Implication	Local Firms Foreign Capital Goods Firms	SMEs	Designers for innovative products	Engineers
Financial Implication	Tax Incentives Industrial Establishments	Local Private Capital	Credits Export Earnings	DOST
Remarks		Emphasis on partnership between foreign and domestic firms	Till trade centre has been established, middlemen should not be abolished.	

Proposals	Program for Marketing	Program for Diversification	Issues of Construction Bonds	Activating Stock and Financial Markets
Objectives	<ul style="list-style-type: none"> ● To intensify the establishment of new coops ● Establishment of integrated marketing centre ● Establishment of post harvest facilities 	<ul style="list-style-type: none"> ● To utilise and mobilise local resources ● To promote multiple cropping for high value-added products 	<ul style="list-style-type: none"> ● To make more funds available for the improvement of infrastructure at municipality and city levels. 	<ul style="list-style-type: none"> ● To supply adequate capital for industrialization ● To reduce foreign capital dependency
Target Population/Area	Farmers Coops	Farmers Coops	Households Domestic and Foreign Portfolio Investors	Domestic and Foreign Portfolio Investors
Executing Agencies	DA CDA ACPC NFA	DA CARD PBSP UPLB	Department of Finance Department of Public Works and Highways Provincial Governments	Department of Finance Financial establishments
Manpower Implication	DTI Coops CDA DA Marketing Specialists	Agricultural Technicians for Diversification CRTD	Financial Specialists Government Officials	Financial Expertise
Financial Implication	ACPC LBP CRB DA DTI	DA LBD RCBs ACPC	Department of Construction Provincial Governments Department of Public Works and Highways	Households
Remarks		Needs to consider the location for the production of perishables	Activating financial markets	Deregulation of financial markets and transaction

Program of Working Group-1a: Agriculture (OFW '95-PHI)

			A.M.	P.M.
September	27	Wed.	Barangay Colaran, Sta. Maria (Green Revolution)	Barangay Colaran, Sta. Maria (Green Revolution)
	28	Thu.	Barangay San Benito, Sta. Maria (Cooperative)	Barangay San Benito, Sta. Maria (Cooperative)
	29	Fri.	Barangay Talangka, Sta. Maria (Livestock and Cooperatives)	Barangay Talangka, Sta. Maria (Livestock and Cooperatives)
	30	Sat.	CEC, UPLB (Briefing by NGOs)	CEC, UPLB (Briefing by NGOs)
October	3	Tue.	Nag Carlan (Vegetable Production and Cooperative)	Calauan (Pineapple Production)
	4	Wed.	Alaminous (Fruit Production)	Bay (Flower Production)
	5	Thu.	Rural Bank	Pasig, Rizal Agricultural Credit Policy Council (ACPC)
	6	Fri.	Asian Development Bank (ADB)	The National Confederation of Cooperatives (NATCCO)
	7	Sat.	Dayap, Calauan Cooperative under NATCCO	Dayap, Calauan Cooperative under NATCCO
	9	Mon.	Calamba (Cooperative Development Authority Region IV Office)	Calamba (Cooperative Development Authority Region IV Office)
	10	Tue.	Agro Forestry	Agro Forestry

Program of Working Group-1b: Non-Agriculture (OFW '95-PHI)

			A.M.	P.M.
September	27	Wed.	Coconut Oil Firm (Frank Baker), Cocomilk Industry	Nata de Coco Firm (Insta Food)
	28	Thu.	Wood Carving, Taka Production	Furniture Shop
	29	Fri.	Department of High Way (Provincial Office)	Construction Site, Hardware Shop
	30	Sat.	Sari-Sari Stores	Car Repair Shop
October	3	Tue.	Jeepney Industry, Tricycle Industry	Jeepney Management, Tricycle Management
	4	Wed.	Public Market Management	Local Supermarkets
	5	Thu.	Rural Bank	Pasig, Rizal Agricultural. Credit Policy Council (ACPC)
	6	Fri.	Asian Development Bank (ADB)	Department of Trade and Industry (DTI)
	7	Sat.	NGO (People Power)	
	9	Mon.	Laguna Techno-park	Coconut Oil Firm (Frank Baker)
	10	Tue.	Industrial Park	

Working Group 2**Human Resource Development:****Education and Health****1. Introduction**

The education in the Philippines with its history and its present status is a subject of great interest to the international community. The purpose of this report is to provide a comprehensive overview of the current situation in the Philippines and to identify the key issues and challenges facing the education sector. The report is organized into several sections, including an overview of the education system, a discussion of the current situation, and a list of recommendations for policy development. The report is intended to provide a basis for discussion and action by the international community and the Philippine government.

Members

	Students#	Name	Nationality	WG
1	95101	Asakai, Katsuaki	Japan	2a
2	95112	Chutivangse, Supiga	Thailand	2a
3	95114	Tsukakoshi, Yumiko	Japan	2a
4	95117	Nakai, Toshiki	Japan	2a
5	95210	Takahara, Sachiko	Japan	2b
6	95314	Tadokoro, Makiko	Japan	2b

Working Group 2

Human Resource Development: Education and Health

1. Introduction

Education and health services are expected to play major roles in transforming the Philippines into a newly industrialized country through developing human resource and their utilization. The type of human resources in demand is changing dynamically in Laguna where the economy is shifting from a predominantly agricultural to an urban industrial base. Laguna has the second largest population in Region IV at present due to its prominent location for rapid industrial growth. Annual growth rate of population averaged 3.05 % in Laguna against the national figure of 2.3 % during the period between 1970 and 1990, with tremendous impact on human resource management in the province. We looked into problems in the education and health sectors by multi-faceted sector analysis which examines equity, efficiency, and relevance of the sectors at the national, regional (Region IV and Laguna Province), school and hospital levels. The purposes of this report are to identify problems and their linkages and to provide bases for policy recommendations in both sectors.

2. Education

2.1 Overview

The focus of this fieldwork is mainly on general secondary education and technical and vocational education at secondary and post-secondary levels in Laguna where the universal provision at the elementary level is nearly achieved. It has also been proved in the recent literature that secondary education has great significance in providing labor force to the growing

industry and service sectors in the economy. As to the elementary level, we look into multi-grade classes and multi-shift schools, which represent a trade-off between equity and quality of education.

We consider limited human resource development as a core problem and clarify the relationship between causes and effects in the problem structure (Figure 1). The linkage of causes and effects is shown in the clock-wise direction, starting from administration and finance, followed by internal and external efficiency and finally leading to limited human resource development (Box 41).

The education system in the Philippines consists of 6 years of primary education, 4 years of secondary education and 2 to 4 years of tertiary education. Secondary education is free but not compulsory. Enrollment in secondary education has been increasing recently (Box 6). In 1994, 4,762,523 students were in secondary education, nationally up 18% from 1990. Thirty two percent of the total students were in private schools in 1994. Total enrollment in Region IV is 699,973, up 19.27% from 1990, and of which 39% is in private institutions. In Laguna Province, 112,941 students were enrolled in secondary schools in the school year (SY) 1994-95 and 46 % of them were in private schools.

2.2 Administration and Finance

Perennial population increase and incomplete reform of central government have aggravated financial constraints in the national budget for education in the Philippines (Box 1-3). Pressure of rapid population growth accelerates increasing ratio of enrolling students up to 6 % annually on average from 1991 to 1994.

The Department of Education, Culture and Sports (DECS) is the executive agency responsible for administration and supervision of the education system in the Philippines. DECS is currently reorganizing its structure to establish Department of Basic Education (DBE), Commission on Higher Education (CHED) and Technical Education and Skills Development Authority (TESDA) respectively by separating the administrative bodies of basic education, higher education, and vocational education. In 1990, the Congressional Commission on Education (EDCOM) was created to examine Philippine education as a

basis for setting up legislative agenda.

Financial constraints on the education budget are rooted in two factors. First, the heavy burden of debt service, which absorbed over 40% of the national budget in 1991, limits the appropriation to education. In addition, Internal Revenue Allocations (IRA) to Local Government Units (LGUs), enacted by the new Local Government Code (LGC) of 1991 has increased the incidence of IRA transfers from 4% of the national budget in 1991 to about 12.4% in 1993. As a result, the education sector receives a rather modest share of the national budget, which is 13-14% of the total expenditure in the period 1991-1994, equivalent to 2.6% of GNP. For the SY 1994-95, P37.8 billion was allocated to DECS, which amounted to 11.8% of the national budget.

Nevertheless, government commitment to education has consistently expanded education outlays since the Free Secondary Education Law in 1987 and nationalization of high schools (Boxes 4,7). In 1988, the public secondary education budget went up to P4.241 billion, representing a 180.68% increase from 1987. Thus, its share of the total national budget went up to 23.97% in 1988, then in 1989 to 34.12% and in 1990 to 34.59%. Budget allocation for secondary education in 1994 is P7,069,934 or 16.7% of the total, that is more than five times of that of 1987. The allocation of educational budget for Region IV was P 4,482,661,000 in 1994, corresponding to 12% of the total educational budget and was one of the largest among the regions. The nationalization of high schools in 1988 reduced the role of local government in the financing of public education. Central government took over the finance of the nationalized high schools and the increasing personnel expenditure such as teachers' salaries. However, lack of adequately sustained financial commitment on the part of central government led to a rapid erosion of resources to finance secondary education.

Meanwhile, in accordance with the LGC of 1991, the construction of schools has been devolved to Local School Boards (LSBs). However, LSBs have failed to take the responsibility for the construction of schools due to the limited funds and the paucity of engineers and architects outside the Metro Manila area. On the part of the central government, due to the increasing share of personnel expenditures in the educational budget after the

nationalization of high schools, capital outlay and Maintenance and Other Operating Expenditures (MOOE) per student have been decreasing, and their financing is becoming dependent on scarce LGU and private sources (Box 8). Thus, devolution has generated winners and losers among LGUs in delivering educational services.

On top of the high enrollment share of private schools, privatization of education is supplemented by the government subsidy to private education. This subsidy is known as the GASTPE (Government Assistance to Students and Teachers in Private Education) program and has two components: Educational Service Contracting scheme (ESC) and the Tuition Fee Supplement (TFS) program. It is funded through the DECS budget to enable youth from low income households to attend private high-schools and colleges. To cope with the overflow of newly entering students (Box 5), DECS has implemented the ESC since 1986, whereby students who can not be accommodated in public high schools would be given a place in a private high school and would pay tuition fees granted by the scheme at the rate not higher than the cost per student in a public high school. From SY 1991-92 to 1994-95, the number of ESC grantees increased from 157,095 to 228,757. To encourage further participation by private schools into the ESC scheme, bureaucratic flaws such as the delays in implementation should be ironed out. Another financing scheme is the TFS program which has been implemented from 1989. In SY 1991-92, the government allocated P290 million for secondary tuition fee supplement of one million private high school students. However in the 1995-96, the number of TFS beneficiaries shrank to half a million and the amount of allocation to P160 million.

2.3 Internal Efficiency

We assess internal efficiency of the education sector in terms of access and quality criteria (Boxes 12,13). Our main focus is on how to attain universal access to quality education. However, many access and quality problems are found in the education sectors at present.

Access

Access to secondary education has increased dramatically since the Free Secondary Education Law was enacted in 1987. However, the cohort survival rate still remains at 72.47% in public secondary schools. Thus, universal

access to basic education has not yet been attained at the national level. Those who have not completed formal schooling become out-of-school youths (OSYs), and have limited access to formal job opportunities. Defining access to education as equal opportunity to participate not only in schooling but also in education of good quality, it is clear that access to quality education has not been universalized and guaranteed.

In Laguna, lack of classrooms is very acute (Box 9). There are two reasons. The first is high enrollment growth due to free education and increasing immigration, especially from Metro Manila. The second is the constraints derived from incomplete devolution. Responsibility for building classrooms was passed from the central DECS to LSBs. But funding does not match the devolved functions. In consequence, there appear many overcrowded classes and double or triple shift classes in urban areas. During our field survey, we found classes of more than 67 students, far bigger than the DECS's standard of 56 students in a class. It brings very negative impacts on the quality of instruction and students' achievement. At multi-shift schools, which we visited, schedule of school activities is divided into two sessions of morning classes and afternoon classes. Although the teaching time is the same as that of single shift schools at the elementary level, there is a problem in that low performing students are forced to take afternoon classes which are often instructed by low performing teachers. On the other hand, we also found combination classes and multi-grade classes in rural schools because of low enrollment. In the multi-grade classroom, grade 1 to grade 3 students attend the same class and grade 4 to grade 6 also study in the same classroom. As one teacher takes care of students of three different grades all day, the teacher faces a heavy work load. To mitigate the situation, sufficient training for multi-grade teachers should be provided and teachers should be given additional incentives or compensations for their hardships.

While tuition for both elementary and secondary levels is free, there still exist other direct and opportunity costs (Box 10). The direct costs include transportation, school uniform and materials. Transportation, in particular, is one of the biggest financial burdens for poor households.

Many private schools are more cost-effective and internally efficient in their delivery of education services than public schools, which is indicated by their

better students' performance and low unit costs. However, access to these schools is limited to children of middle class families and above due to high tuition fees and other direct costs incurred. Thus, cost-effectiveness and high internal efficiency of private schools justify government subsidies to children of poor families who wish to enroll, so that universalization of basic education can be achieved in the near future. However, there are some shortfalls in the government subsidy schemes such as ESC and TFS. As to the ESC scheme, better private schools, unable to collect their full operating costs from ESC beneficiaries, are withdrawing from the scheme. As to the TFS scheme, although it aims to maximize the number of beneficiaries, the tuition fees it grants are substantially below the actual cost of private schools. As a result, TFS students are required to pay the difference between subsidized tuition fees and actual costs, which eliminates a large segment of the target population.

Quality

The ten-year length of basic education in the Philippines, which is shorter than many other countries, adversely affects subsequent performance at post-secondary and higher education (Box 11). The length of secondary education is not only an access issue, but also one of the serious policy issues regarding educational quality. Various policy reports examine the current four year program and argue that the length of secondary education should be extended from four to five years. However, extending the current four-year system of secondary education to five years is an extremely controversial issue. Especially for private tertiary schools, which mainly depend on their tuition fees for revenues, lack of enrolling students in the year of extending secondary education cycle would affect them adversely for subsequent years.

The financial data of sample public schools which we visited shows that budget of capital outlay is zero. Maintenance and improvement of facilities is entirely financed by parents of students, whose incomes are low in rural areas. Thus, disparities of school facilities and equipment have been widening among schools.

According to the DECS standard, the textbook-student ratio is 1 : 1, but due to dysfunction of the distribution system, universal provision of textbooks in some subjects has not achieved (Box 9). DECS has the capacity to publish

textbooks for all students at 1 : 1 ratio, but schools do not have means of transportation such as jeepneys to acquire them. Therefore, students in rural areas have to share textbooks at around 1 : 2 ratio.

In addition, low quality of science and mathematics education impedes further development of science and technology (S&T) manpower. The causes of the problem are three-fold. First, there is a large disparity in the provision of equipment and facilities among schools. Particularly, science laboratories in public schools are in poor condition compared with those of private schools. Second, the medium of instruction for science and mathematics is English, followed by the bilingual educational policy (Box 11). Lastly, there is a shortage of qualified science and mathematics teachers.

Quality of education, to a large extent, relies on effective performance of teachers. In Laguna, there were 212 applicants for teaching occupation (male 30, female 182) in 1995. However, the level of salaries as well as the working conditions of teachers are very low. Although teachers' basic salaries were upgraded by 76% under the 1989 Salary Standardization Law, recording a four fold increase between 1985 and 1995, teachers' salaries still start at P4,900 a month, which is slightly above the poverty line. It also lowers the quality of new applicants to teaching occupations as well as the number of students entering teacher training institutions (Box 9). Low salaries also cause teacher vacancies for certain subjects.

The failure rate on the Professional Board Examination for Teachers (PBET) is as high as 70% on average between SY 1992-94. The PBET should be reconsidered for its validity and appropriateness as a measure of professional competence. It was enforced as a hiring requirement in 1994. However, it is found that the non-PBET teachers still remain in many schools. To enhance the knowledge, skills and competencies of teachers within the limited budget, in-service training should be reinforced. DECS and teacher training institutions conduct training programs at each of national, regional, district and school levels. Nevertheless, its implementation involves a number of deficiencies. For instance, training period is only 2 days to 1 week and it is conducted only once a year at provincial or school levels. There should be more school-based in-service training, with schools involved in the identification of their own training needs. Furthermore, it should be delivered

directly to classroom teachers, particularly to those without appropriate qualification and training in the multi-grade and science classes.

2.4 External Efficiency

External efficiency of the education sector is determined by the relationship between education and its political, social and economic impacts. The dysfunction of the educational system indicated in low internal efficiency usually leads to the poor external efficiency such as limited empowerment of society, low level of social mobility, irrelevant skills and low productivity of graduates. We will focus on vocational and technical education in detail because external efficiency is particularly important in this field. We consider at what costs graduates are produced and how they perform in the labor market.

First, empowerment of society is the most up-to-date issue. Empowerment is attained through the process of education. Education is expected to promote participation in political activities, conscientization and identification as a civil person. However, as internal efficiency of the educational system in terms of access and quality is low, education can hardly play its role to empower people (Box 19).

Second, in spite of tuition-free policy of secondary education, opportunity costs and direct cost of education still remain a heavy burden for low-income families. Children are regarded as valuable labor force and therefore can not seek further educational opportunities. This constrains their opportunities to gain occupations with high income potentials. Thus, most children in the low-income families end up with low social mobility (Box 20).

Third, educational prevalence has strong relationship with economic growth, which should be examined from both supply and demand perspectives. At the supply side, formal and non-formal education is essential for developing manpower bases. Above all, vocational and technical education play a central role in providing occupational skills. At the same time, low quality of vocational education and irrelevant skills lead to low productivity of graduates (Box 21). At the demand side, in the adverse economic environment, there are persistent problems such that human resources can not be fully utilized. As elaborated later, the most serious problem in the Philippines with regard to human resources, is the lack of employment

opportunities in the country, which pushes people to seek employment as overseas contract workers (OCWs) and leads to brain drain.

Technical and vocational education is currently provided by three agencies (up to December 95) : DECS at the secondary level; TESDA which was transferred from the National Manpower and Youth Council (NMYC) taking charge of the post-secondary level and OSY; and CHED which focuses on the tertiary level. However, the overall quality of training is still low on the whole because of irrelevance of training programs, shortage of facilities, lack of funds and so on. High costs of updating technical and vocational education programs compound the problems (Box 9). Training programs are no longer relevant to the changing skills needs in industry. There is a serious problem of mismatch between the graduates from training institutions and the demand of the industry. Furthermore, delivery system of training programs is not adequate and training opportunities are not available in some urgently required areas. In 1992, the proportion of mismatched skills still stood at 95.1% and matched skills remained as low as 4.9% at the national level.

It should be noted that some private training institutions are committed to providing updated programs conducive to the changing needs in industry as is adopted by Dual Technical Center in Don Radon A. Yulo Campus and Don Bosco School in Calamba. The dual training system is an innovative vocational training program that combines two places of learning - the school and the factory. It is expected to enhance the quality of skills provided while matching the needs of labor market and boost the employability of the graduates. However, this kind of training center is still scarce. To upgrade the skills of graduates and enhance their trainability, close cooperation between schools and companies should further be established.

2.5 Human Resources and Labor Market

The size of the labor force in Region IV ranks second in the country at 3.7 million (12.9 % of the national labor force), of which 3.38 million are employed. The Labor Force Participation Rate (LFPR) in 1995 registers 64.6 %, up by 0.9% from 1994. On average, LFPR in rural areas is higher than that in urban areas.

In 1995, 25.2 million (or 43.3%) of the employed labor force in the whole

country had finished only elementary education, 8.22 million (32.6 %) secondary education and 5.2 million (20.48 %) higher education. The bulk of elementary graduates are absorbed by agricultural or manufacturing sectors as farmers or unskilled labors. While those laborers without sufficient skills and education have limited access to scarce formal job opportunities in the domestic labor market, those with advanced skills are not fully absorbed by the economy due to low wages and poor working conditions (Boxes 14,15). This poor condition of domestic employment adversely affects the labor force. Highly qualified workers such as engineers and medical doctors and others who can afford to go abroad take overseas employment in order to get better payment and thus constitute Brain Drain or OCWs (Box 16).

In addition, OCWs, who are originally semi-skilled workers and some professionals like school teachers, have become a significant issue (Box 17). The number of OCWs has increased dramatically, especially in the Middle East. In Region IV, the number of OCWs was 144,000 in 1992 and most of them were male. It was also found that OCWs increased by 184% from the year 1984. From the economic point of view, OCW workers help the Philippine economy through their remittances to the country, however, it often involves negative social problems such as dispersion of families and loss of needed professionals such as teachers and technicians. These overseas employment opportunities impede establishment of middle-layers in the Philippine society. Therefore, government should consider macro economic policy measures of creating more domestic employment opportunities in the formal sector, and at the same time regulate minimum wages and improve working conditions.

3. Health

3.1 Overview

The status of health in the Philippines has improved gradually, although progress has been slower than that in other Southeast Asian countries, largely because of limited financing for adequate health care. The LGC was passed in 1991 and has been implemented since 1993. All the Department of Health (DOH) facilities at the local level such as barangay, municipality, provincial and cities were devolved. This devolution is expected to bring improvements

in that local government will be more accountable for the services provided and adopt these services to local needs, and that inefficiency of the central bureaucracy will be corrected at the local level. On the other hand, LGUs are inadequate in resource management, which means potential increase in cost and adverse impacts for the poor. This section will mainly discuss the impacts of devolution on the health sector in Laguna, in terms of three aspects: 1) administration and finance; 2) health care; and 3) family planning.

3.2 Administration and Finance

Changes in Management

Since the Philippines has chosen a radical restructuring of health service organizations, changes in sector management remain uncertain. In the process of the devolution, LGUs are required to establish a Local Health Board (LHB), which consists of provincial health officers, NGO representatives and DOH personnel. It is the advisory body for policy-making. However, in Laguna, they have never held meetings to discuss policy issues including the controversial policy on family planning. The functions and effectiveness of the board should also be discussed. In terms of operations and maintenance of health services, DOH sends representatives to monitor and evaluate the programs. It is however crucial for LGUs to establish their own effective monitoring and evaluation systems for the health sector.

Fiscal Impact of Devolution

After three years of implementing LGC '91, budgetary constraints are a significant issue, especially in LGUs with poor resources. In most LGUs, the issue is more serious now than before the introduction of LGC '91. Because of inadequate local financial resources, LGUs cannot afford sufficient health and related services. The national government's IRA is provided to the different levels of LGUs. While provinces and cities receive the same share of IRA, provinces shoulder 60% of the total cost of devolution for health services and the cities shoulder only 2.5%. Thus there appears to be a mismatch between IRA allocation and expenditures for devolved functions.

Devolved Health Manpower

At the beginning of devolution, about 45,000 DOH employees were transferred to the more than 1,700 LGUs. However, many of those devolved workers were forced to join LGUs which were not ready to accept them. In

terms of salary allocation, 50% is provided by the national government and another 50% by LGUs. It is hard for 5th and 6th grade municipalities to pay the salaries of their health personnel.

NGO Participation

LGUs encourage private sector participation in the delivery of health services. NGOs and people's organization take part in LHBs. It is critical for LGUs to establish productive relationship with NGOs in order to make up for the gaps in the coverage of health services, which arise from the limited target areas of NGOs (Box 31).

3.3 Health Care

The 1994 health status of the province of Laguna is shown by the following indicators: the crude death rate was 2.29/1000 (compared to the national average of 6.76/1000); infant mortality rate was 18.39/1000 (national rates, 53.95/1000); and maternal mortality rate was 0.29/1000 (national rate, 3.5/1000 in 1993). Thus Laguna is faring much better than the nation's average. However, there is room for further improvement.

Maternal & Child Health Care (M.C.H)

The place and attendance of delivering children is important for maternal and prenatal health. For 1994 in Laguna, only 22.29% (5,358) of the 24,037 births were in governmental or private hospitals and 77.17% (18,549) were delivered at home. These births were administered by midwife (58.70%), trained or untrained "Hilot" a traditional midwife in the Philippines (31.40%), other than doctor (7.70%), or nurse (2.20%). Most home deliveries, which account for 77.17% of the total deliveries, are risky because of insufficient equipment and poor sanitation.

Health programs such as immunization and food and micronutrient supplementation have been carried out; however, these are still insufficient in terms of their sustainability.

Water and Sanitation

Laguna has achieved the rate of 85.46% of households served by safe drinking water and 85.13% equipped with sanitary toilet facilities. Although

Laguna Province shows among the highest provincial percentages, intensified and well-coordinated efforts by LGUs are still needed to fully eradicate incidence of results from the vicious cycle of disease, malnutrition and poor environmental sanitation (Box 35).

Facility and Equipment

As of 1994, there are 167 Barangay Health Stations (BHSs) out of 673 barangays in Laguna, with the ratio to population 1:9,357. When villagers can not receive treatment at BHSs due to insufficient medicines and inadequate medical equipment, they have to go to a hospital or to another BHS which has doctors and appropriate medical supply and facilities. Accessibility is of critical importance when acute problems arise (Box 43).

Including both governmental and private facilities, the hospital bed to population ratio was 1:1,117, slightly higher than the standard ratio of 1:1,000. However, disparity in occupancy rates exists between governmental hospitals. Governmental hospitals have also suffered from poor maintenance and insufficient medical instruments and supplies. Private hospitals usually have sufficient health facilities and equipment, but they are expensive for the poor and middle income families (Boxes 32-35).

Health Manpower

Numbers of medical personnel are also insufficient in Laguna. For example, from 1993 to 1994, only the number of dentists increased. In order to increase trained manpower, especially in rural areas, training programs are needed for midwives and health workers (Box 30). Furthermore, absorptive capacity for highly trained manpower is low (Box 29). According to a professor of the School of Health Science, University of the Philippines, Manila (UPM), most graduates of UPM prefer to work abroad. Even if they work in the Philippines, there are not so many professionals willing to work in rural areas, because of low salary, low job security, insurgency, preference for urban life, and insufficient medical facilities and equipment which constrain full use of their technical ability. Insufficiency of trained and highly trained personnel as well as health facilities, equipment, and supplies are largely attributed to the limited political will and financial capacity of LGUs (Box 23).

3.4 Family Planning

The goal of family planning programs is not only to reduce fertility but also to improve and maintain health of mothers and children by providing accurate and timely information and services.

Demographic Picture

The population in Laguna increased rapidly from 1.25 million in 1991 to 1.56 million in 1994, making it one of the most populous provinces in the Philippines. Although this population growth (1.24%, in 1994) is mainly due to internal migration, especially from Metro Manila, fertility rate is still high especially in rural barangays (Box 40).

Low Contraceptive Prevalence

Although contraceptive prevalence rate in Laguna is 28.3% in 1994, that at the national level is 40% which is the lowest in Asia (Box 39). LGUs are directed by DOH to promote artificial contraceptive methods rather than natural ones. On the contrary, the newly elected governor of Laguna decided to prohibit artificial contraceptives in 1995. He is a member of "Opos Del", which follows Catholic Church teachings opposing artificial contraceptives (Box 37).

The other factor accounting for the low contraceptive prevalence rate is the men's negative attitude to using family planning methods (Box 38). Women are forced to take contraceptive methods which may have side effects, for example, IUD, pills, tubal ligation, because men are usually reluctant to use condoms in family planning. According to key informants we met, it is also believed that using condoms is associated with prostitution and AIDS. It is important to introduce proper education programs on AIDS into family planning.

3.5 Information, Education, Communication, Motivation (I.E.C.M.)

I.E.C.M. is one of the most important components of health care and family planning. Lack of I.E.C.M. also causes less accessibility to health services and family planning information. Some organizations, for example, DOH and UNICEF, practice mass information campaigns. However, they are weak at monitoring and evaluation. Although seminars such as mother's classes are sometimes held, the number of seminars is few, and attendance is also low as

mothers are busy.

As a whole, most people are not interested in the condition of their own health. Unless they go to hospitals or health stations by themselves, they cannot gain access to health services. To promote I.E.C.M., it is necessary to train health workers, promote community based information and education, and increase coverage of house to house services (Box 35).

4. Concluding Remarks

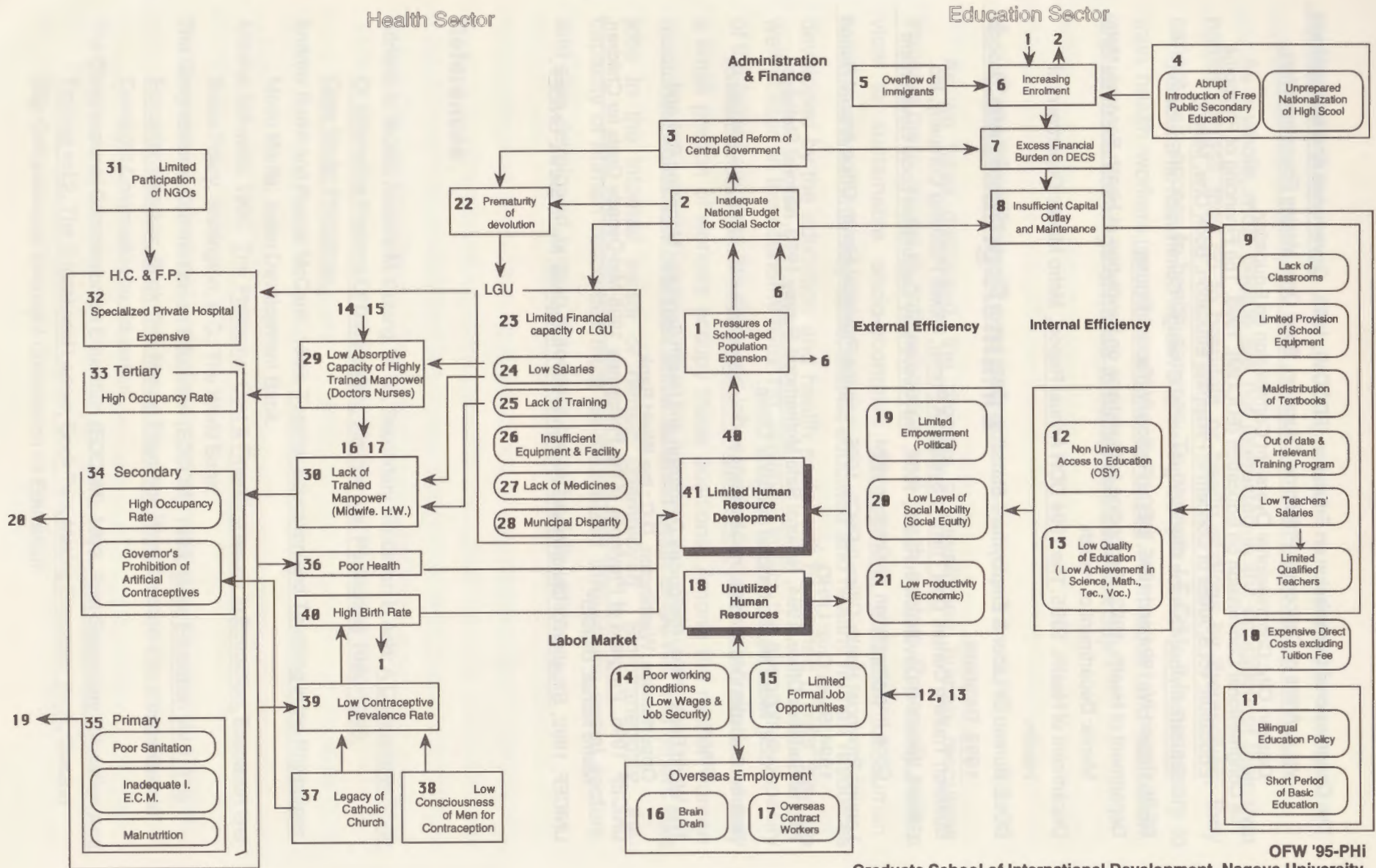
As we have discussed, the process of developing human resources involves many issues in both education and health sectors. Especially, with a view to sustainable socio-economic development, utilization of human resources is another key issue; that is, educated and healthy human resources developed by the education and health sector will be wasted unless they are well-utilized in the economy (Box 18). However, in fact, the absorptive capacity of the formal sector in the domestic labor market is extremely limited, and only a small portion of workers occupy these positions. Among the rest of human resources, some flow overseas either as Brain Drain or OCWs, and others take jobs in the informal sector or remain unemployed. Simultaneously, the capacity of human resources must be maximized through the social sectors, and also developed human resources must be fully utilized.

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**Figure 1. Problem Structure Diagram
Education and Health (WG-II)**



WG-2 Human Resource Development: Education and Health

Table 2. Proposals of the Education and Health Sector

Proposals	Capacity Building for Resources Management	Universal Access to Education	Quality	Private Sector Involve	Access to Family Planning and Primary Health care	Capability Building and Mobilization of Local Health Board
Objectives	1) Increasing Capital Outlay & Maintenance and Other Operating Expense through Mobilizing Resources 2) Enhancing Managerial Capacity of School Administrators	1) Extending Length of Secondary Education from 4 to 5 years 2) Assistance to Reduce Direct Cost 3) In-service Teacher Training		1) Rectify Mismatch of Skills by Combining School and In-Plant Training Program (Dual Tech) 2) Fulfilling the Abilities and Values Conducive to Productivity and Competitiveness	1) Increase and Sustain the Program of F.P. and P.H.C. 2) Training Program for Rural Health Personnel 3) Maximize Participation of Private Sector	Strengthen the Capability of LHB and Activate the LHB Role (1) in Social Mobilization to Improve Health Services, (2) Coordination among DOH, LGUs, and NGOs, and (3) Monitoring and Evaluation.
Target Population /Area	1) Schools of disadvantaged conditions 2) School principals and provincial/district officers, Local School Boards	1) Secondary & Tertiary Schools 2) Students from Low-income Family 3) Multi-Grade Teachers Science & Math Teachers		1) &2) OSYs, Secondary Graduates, Existing Labor Force	1) People who Need F.P. and P.H.C. 2) Midwives and Social Workers, Local Administrators 3) Private Sector	LHB Members, DOH Officers, Local Chief, NGOs Executives
Executing Agencies	1) DECS and Local Government Units 2) Training Institutions (e.g. Asian Institute of Management, MBA Course)	1) DECS, CHED 2) DECS Division/District Offices, LBSs, Schools 3) DECS, Teachers Training Institutions, UPISMED, RSTCs		1) &2) TESDA, Private Technical & Vocational Schools, Industrial Establishments	1) Regional Health Office 2) DOH, PGH 3) NGOs	DOH, Provincial Health Office, NGOs
Manpower Implications	1) Local Government Officers, School Principals, Teachers, Parents, Community Leaders 2) Instructors of Training Institutions	1) DECS, CHED Planners/Researchers, Politicians 2) DECS District Officers, School Principals, Custodians, Education Cooperatives, Related Private Sectors, PTAs 3) Supervisors, Teacher Training Instructors		1) Industrial Coordinator in Monitoring Training, Training Instructors, Churches	1) Barangay Health Workers, Midwives, Barangay Captains 2) Medical Instructors 3) Supervisors (DOH, LGUs, NGOs)	Provincial Health Officers, DOH Staff, NGOs Staff, Management Training Consultants
Financial Implications	1) Local Companies, Communities, PTAs 2) DECS, Training Institutions, Overseas Funds	1) Increased Budget for Secondary School (25%), Loss of Entrance & Tuition Fees for High Education Institutions, Overseas Funds 2) Local Funds 3) Local & Overseas Funds		1) Industrial Establishments, Tax Incentives 2) Industrial Establishments, Training Institutions	1) ,2) IRA, Municipality Funds Raising, Foreign Aid (USAID, UNFPA, UNICEF, JICA) 3) Cooperate Funds	IRA, Provincial Funds, Foreign Aid
Remarks	1) Optimum Allocation of Mobilized Resources is Required. 2) Evaluation of Managerial Capacity is Required	1) To Mitigate Political Factors is Required 2) Monitoring and Evaluation is Essential 3) Direct Delivery to the Classroom Teacher Level		8 mths. Basic Theoretical Training at School, and 20 mths Practical Training in Plant	*Involvement of Men in F.P. and Image of Contraceptive Use should be improved. *IRA should be Allocated to the Poor LGUs Until the Devolution Process is Completed. *Further Research will be Required at UPLB to Identify the Effects of Devolution in the Province.	Close Coordination among DOH, LGUs, NGOs is Essential.

Figure 1. Problem Structure Diagram
Education and Health (WG-II)

Program of Working Group-2a: Education (OFW '95-PHI)

		A.M.		P.M.		
September	27	Wed.	Office of the Planning Services (DECS) Department of Basic Education	Technical Education and Skills Department Authority (TESDA) National Educational Testing and Research Center (NETRC)		
	28	Thu.	DECS Region IV Office	Asian Development Bank		
	29	Fri.	National Manpower and Youth Council (NMYC) Department of Labor and Employment (DOLE)	UNICEF		
October	3	Tue.	DECS Office in Provincial Government Office	Secondary School (Rural), Elementary School (Multigrade)		
	4	Wed.	Secondary School (Urban), Elementary School (Multishift)	Secondary School (Private)		
	5	Thu.	Vocational School (NMYC), Vocational School (TESDA)	Technical School (Private)		
	6	Fri.	Teacher College (Public), NGO (pre-school)	JICA Project Office (Science and Math Education, U.P. ISMED)		
	9	Mon.	Collecting Supplementary Information (DECS)			
	10	Tue.	Collecting Supplementary Information (DECS)			

Program of Working Group-2b: Health (OFW '95-PHI)

		A.M.		P.M.		
September	27	Wed.	Department of Health (DOH) (on the Implementation of LGC '91 & Health Care/ Family Planning)			
	28	Thu.	Philippine General Hospital (PGH)	U.P. Diliman		
	29	Fri.	WHO	UNICEF		
October	3	Tue.	DOH Office in Provincial Government Office Provincial Hospital	District Hospital		
	4	Wed.	Municipality Hospital	Private Hospital		
	5	Thu.	Barangay Health Centers (2 Urban and 2 Rural)			
	6	Fri.	NGOs (Health Care/ Family Planning/ AIDS)			
	9	Mon.	Collecting Supplementary Information (DECS)			
	10	Tue.	Collecting Supplementary Information (DECS)			

Working group 3

in the Philippines, the deterioration of natural resources is a serious national problem. Forest resource depletion is taking place at an alarming rate with the growing population in the country. Only 6.46 million hectares of forest lands are left in the country. The Department of Environment and Natural Resources (DENR) has been carrying out various programs and projects like the Integrated Social Forestry Program (ISFP), Community Forestry Program (CFP), National Forestry Program and so on. Especially the ISFP and CFP are the main programs of DENR to improve the economic condition of forest occupants and to conserve the remaining timber resources. It is expected that the DENR will continue to carry out these programs in the future.

Environment and Infrastructure

To answer these crucial problems, the Department of Environment and Natural Resources has been carrying out various programs and projects like the integrated Social Forestry Program (ISFP), Community Forestry Program (CFP), National Forestry Program and so on. Especially the ISFP and CFP are the main programs of DENR to improve the economic condition of forest occupants and to conserve the remaining timber resources. It is expected that the DENR will continue to carry out these programs in the future.

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Working Group 3

Environment and Infrastructure

1. Introduction

Working Group 3 carried out research on environment and infrastructure problems in Laguna. This report focuses on the following 5 aspects - forest, water, land use & housing, and urban service/garbage. Laguna Province has two important characteristics relating to our concerns. First, it has rich natural resources - Mt. Makiling, Laguna de Bay and the forest surrounding it - which means that it has to take care of them. Secondly, population also has been expanding continuously with high growth rate. According to the JICA report (1991), the social population growth rate in Laguna province was predicted to be 3.4%, contributing about 97% in the total population growth rate of 3.5%. This rapid population growth has brought about a variety of urban and environmental problems, including urban sprawl, deforestation and water pollution in the province. In the following sections we consider these questions, and then put forward five policy proposals. Instead of waiting for national government programs, we suggest alternatives taking into account the limited capabilities of LGUs, especially in terms of finance.

2. Environment

2.1 Forest

Deforestation

One fifth of the Asian and Pacific region's lands is forested. However, the forest is disappearing at the rate of nearly four million ha per year, largely because of the need of a growing population for fuel and cultivable land. Trees are replanted is at only half that rate. Countries that were once major

exporters of wood are now net importers. At current rates of harvesting, the region's remaining timber reserves will disappear in less than 40 years. Such deforestation has been partly responsible for air pollution, soil erosion, degradation of watersheds, and disappearance of wild animals. Forests are sites of vital ecological activity, so if they disappear, many problems will occur ¹⁾.

In the Philippines, too, deforestation or too much cutting of trees is a crucial national problem. Forest resource depletion is taking place at an alarming rate with the growing population in the country today. Out of the original 15 million ha of forest lands, only 6.46 million ha are left. Approximately, 6.5 million ha of open and denuded lands need immediate rehabilitation. Non productive land accounts for 1.79 million ha. Less than 1 million ha are old growth of virgin dipterocarp forest ²⁾. Deforestation causes soil erosion, which is one of the most pressing national problems. One of the major causes of soil erosion is farmers' activities in upland areas. Since the agricultural capacity of lowland areas has decreased due to slash and burn and other destructive farming methods, the lowland farmers are forced to move to the uplands and cultivate using lowland agricultural techniques. Furthermore, the land tenure situation aggravates the problem. Poor upland farmers do not have any land tenure, so all of their activities are illegal. As the farmers do not have long term control of the land, they practice destructive ways of farming without considering their sustainability. This puts further pressure on the already fragile upland ecosystem, and the upland farmers become poorer.

Government Programs and Projects

To answer these crucial problems, the Department of Environment and Natural Resources has been carrying out various programs and projects like the Integrated Social Forestry Program (ISFP), Community Forestry Program (CFP), National Forestry Program and so on. Especially the ISFP aims to uplift the socio-economic condition of forest occupants and at the same time maximize the use of forest land and ensures ecological stability. This program provides forest occupants, like upland farmers, security of tenure over the land through a long-term stewardship contract. The participants are given technical

¹⁾ DST, "The Environment Program of The Asian Development Bank." Asian Development Bank.

²⁾ The data are indicated by Department of Environment and Natural Resources (DENR).

support and offered livelihood opportunities. Involvement in the programs means that the upland farmers' activities are regulated. However, all over the Philippines, there are still many similar problems in forested areas and the degradation of forest is still going on.

Problems in Laguna Province

In Laguna province, our working group observed serious degradation of the forest/watershed. One of the crucial causes of degradation which the working group observed was squatters' activities in the uplands (Box 5). The term "squatters" refers to those occupants who do not have any legal land tenure. Due to industrialization and rapid urbanization in Laguna Province (Box 20), the poor have been forced to leave their original land. The modern industrial sector generates few employment opportunities for them. Hence, some of them have moved into the upland, where they practice "slash and burn" farming (Box 6) and illegal cutting of trees (Box 2). As an alternative, these squatters should be provided with other appropriate livelihood opportunities through training on agro-forestry or given security of tenure under ISFP. However, in the case of Mt. Makiling, the land is owned by the University of the Philippines Los Baños (UPLB), and mountain residents try to get tenurial agreement from UPLB authorities. No satisfactory agreement has yet been reached.

A further difficult environmental problem is the temporary garbage dumping site at Mt. Makiling (Box 12). This dumping site was selected by the municipal government of Los Baños. However, its location will affect the water quality of Laguna de Bay. According to the municipal government, there is no land available to relocate this dumping site, because about 60% of the land in Los Baños is owned by institutions like UPLB and the International Rice Research Institute (IRRI). Our working group also observed upland scavengers at the dump site. They select valuables to sell and dump leftovers directly into the creek. Such action is dangerous for the watershed and quality of water. However, this activity is their livelihood.

In the case of Los Baños, inadequate monitoring system and poor project management by the local government unit have contributed to the perpetuation of the above problems.

2.2 Water

Laguna de Bay is located in CALABARZON region, which is a growth center of the Philippines. Under the rapid urbanization and industrialization (Box 20), the lake is used for various purposes such as navigation, reservoir, households, fishery, power plants, industry and agriculture. These human activities are damaging the water quality of the lake, and countermeasures are as yet insufficient. Our working group observed water use by industries, households, a poultry house, a piggery and a fishery. These are certainly contributing to deterioration of the lake environment through water pollution, siltation and flooding.

Water Pollution

There is a common consensus that Laguna de Bay is dying due to water pollution. According to Laguna Lake Development Authority (LLDA), the pollution sources and their contributions are the following; industrial waste 30%, domestic waste 30% and agricultural and animal waste 40% (box 19)³⁾. Particularly, the influence of industries on water quality is critical because they contribute not only to organic pollution but also toxic and hazardous contamination.

Of the industries around the lake, only 69% have wastewater treatment facilities. However, some of them operate their treatment facilities only when they are inspected by the regulating agencies. A researcher of a blue-chip entrepreneur said that manufacturers have been able to dump waste water anytime without processing because monitoring is rare. Moreover, there are many small industries not counted or included in official monitoring, which discharge waste water into the lake.

Siltation

The condition of Laguna de Bay is intimately linked with the watershed in the mountain areas around the lake. Denudation of the watershed areas due to illegal logging and farming (Box 2, 6) directly affects the quality of the lake in the form of soil erosion (Box 7). The lake is gradually becoming shallower. Its depth is now only 2.8m though it was 7m previously.

³⁾ LLDA, "Laguna de Bay : problems, issues and proposed solutions" Laguna Lake Development Authority.

Flooding

After heavy rain, flooding can be seen in some coastal areas of Laguna de Bay. This is a recent phenomenon. Denudation allows water to pass directly into the lake. Due to siltation, the shallow lake cannot absorb the increasing volume or quantity of water. Besides, the Manggahan Floodway, constructed to divert the flood waters from Metro Manila, does so at the expense of the surrounding communities.

Economic Costs of Laguna de Bay Degradation

These degradations have negative impacts on economic activities (Box 15). Water pollution severely decreases fishery and poultry productivity. Annual fish production has fallen from 80,000 metric tons in 1964 to 8,376 metric tons in 1989. As a result, the number of fisherfolk working the lake decreased from 13,000 in 1964 to 8,620 in 1983. Poultry industries in barangay in Calamba also decreased from 80 in 1994 to 10 in 1995 because pollution of the water killed a large amount of shells which are feed for poultry. In the long run, contaminated water also will affect human health.

Flooding contributes to decreasing agricultural productivity. In most of the agricultural areas situated to the west and south of the lake, flooding generally occurs 1 to 2 times a year resulting in a 10% reduction of yield. In severely flooded areas, flooding lasts from 2 to 5 weeks. Yield reduction of crops is about 60%. Flooding also interrupts road transportation and may cause sanitation problems⁴⁾.

Conflicting Use of the Lake

As shown in the problem structure diagram, each cause of degradation is the result of more fundamental factors. These are short term profit maximization due to low public awareness (Box 26) and overall low capability of government (Box 3, 4, 8 and 9).

Many people do not realize or care about the impact of their activities on the environment. Some fisherfolk believe that the more feed they give for fish, the bigger the fish become. Their short-term profit maximization results in

⁴⁾ LLDA, "Laguna de Bay : problems, issues and proposed solutions" Laguna Lake Development Authority.

water pollution, and they lose long-term profit. Even those who are aware of the deterioration of the lake do not cooperate with each other to improve water quality because they never seriously mind water pollution until it directly reduces their own economic profit. Therefore, inter- and intra-economic sectors have been unable to overcome their short-term conflicts of interest. On the other hand, regulating agencies like LLDA and DENR which should play an important role to coordinate conflicts of interest are incapable of implementing their proposed standards due to inadequate facilities, personnel, funds, and political feasibility.

3. Infrastructure

3.1 Land Use & Housing

Land speculation (Box 27) and urban sprawl including illegal land conversion and squatter settlements (Box 21) are observed in Laguna Province. These are mainly due to industrialization and rapid urbanization in these areas (Box 20) which are receiving the spillover of population from Metro Manila, and in-migration due to the lure of employment opportunities in this province. As a consequence of land speculation, the housing supply for low income households is decreasing. On the other hand, squatter settlements in the province are expanding (Box 28). Land speculation also stimulates land conversion, including illegal uses. For many areas there are no land use plans, and even when land use plans exist they do not necessarily work to control such informal land conversions, since they are frequently outdated (Box 17).

Land Use Plan

Industrialization and rapid urbanization have also caused an explosion of garbage (Box 16), waste waters (Box 19), and squatters in upland areas (Box 5). Furthermore, as mentioned above, there are no land use plans for many areas, and in other areas land use plans are outdated. This hinders sustainable land use and results in problems including inadequate road network (box 18) and temporary garbage dumping sites (Box 12). In the province, only 17 out of 30 municipalities have land use plans. Further, for example, the latest land use plans of Calamba and San Pedro municipality

were drawn in 1981 and 1982 respectively. In addition, since a new road development project for the province has been studied at the national level, even rural municipalities should immediately start the formulation of land use plans. In sum, municipalities, including even those in remote areas, should quickly update and/or formulate their land use plans.

Housing

Subdivision developments have been implemented by the private sector and by the National Housing Authority (NHA). Some subdivisions put up by NHA are for households below the poverty line. However, there are some subdivisions where people actually live in only about 80% of the lots and the remaining 20% are for land speculation. In effect, those subdivisions are for middle/high income households including the Overseas Contract Workers (OCW). Actually, low income households have not been able to afford the "low-cost" houses due to skyrocketing land prices and costs for building materials.

In Laguna Province, many squatters have settled in various places. One case is along the Philippines National Railways (PNR) lines. Since these squatters have "approval" from influential persons under the name of PNR, they can live there. However, newly migrating people can not get the "approval." Influential people living around there rent houses or rooms to them. In another case, a squatter in Macabling, Santa Rosa, rents a house to another squatter. The reason many squatters are living in Macabling is the good environment for children, such as air, water and education. But on weekdays some fathers of the children stay elsewhere, near to their workplaces (eg, in Manila,) and they come home only on weekends. The other case are the squatters living in the lakeshore of Laguna de Bay in Pila Municipality. These squatters face the problem of losing their houses and lands on account of the law which says that the lakeshore areas are government lands. Presently discussions are being held to make them legal land owners through the help of some institutions and NGOs. Furthermore, the OCW are popular even among squatters. Many people have built or have improved their houses in the subdivisions or slums by the remittances from their family members working abroad.

Government & Individual

Government agencies have inadequate capability to monitor urban sprawl (Box 9). Coordination among related agencies and inhabitants is also weak (Box 3). Government units have not successfully hammered out an effective strategy to promote housing provision for the poor. As mentioned earlier, local governments have been required to formulate/update their respective land use plans which are a basic tool for controlling urban problems. On the other hand, "people-centered development" should be considered together with "community-centered development", because people tend to recognize the term as "individual-centered development."

3.2 Urban Services / Garbage

Waste disposal is a subject of dispute all over the world. The Philippines is no exception. Population growth and change of life styles have brought a voluminous increase in garbage. Laguna Province has two critical characteristics with respect to the garbage problem. First, Laguna Province contains Laguna de Bay. Laguna de Bay is becoming polluted because of insufficient garbage disposal systems in the municipalities surrounding it. The denudation of the watersheds also triggers off pollution of water resources (Box 14). Second, Laguna Province faces rapid population growth, mostly due to migration, which contributes to the increase in the amount of garbage (Box 16). Many newly constructed subdivisions have had difficulty introducing adequate garbage disposal technology and collection services (Box 10, 11). The subdivisions are sometimes established without any thought for effective garbage disposal and collection, thus resulting in the putting up of temporary garbage dumping sites (Box 12).

Administration

Since the enactment of the Local Government Code of 1991, all cities and municipalities (LGUs) have already been responsible for their own garbage management. The following observations are based on the fieldwork at Calamba, Los Baños, San Pablo, San Pedro, and other municipalities. Moreover, it must be noted that these LGUs are located in the western part of Laguna Province which is facing rapid urbanization.

Admittedly, National Government Agencies (NGAs) give no financial support to LGUs. However many of them show concern with the garbage

problem by formulating guidelines, and sometimes exert authority with respect to this problem. For instance, LLDA has the power to close the open dumping sites which might cause pollution of Laguna de Bay. The NGAs in charge of preparing and approving land use plans, such as the Housing and Urban Development Coordinating Council (HUCC) and the Housing and Land Use Regulatory Board (HLURB), also require systematic waste and garbage disposal schemes. LGUs attend a meeting in Manila once a year conducted by the Presidential Service Office (PSO), the monitoring agency under direct presidential control. LGUs must submit reports on garbage and receive some advice from the PSO. However, there is no information exchange between LGUs.

Garbage Collection

In general, the LGUs we studied have a few garbage collection dumpcars and one garbage dumping site each. They provide garbage collection service, but this is limited mainly within the central town area. In two subdivisions we visited, one received the service from the municipality once a month, and the other was negotiating to be included. In order to dispose their garbage, inhabitants sometimes hire a private contractor or dig pits in their backyards where garbage is placed. We also saw the same situation in other barangays. LGUs are unable to set up the necessary systems to keep up with the extremely rapid urbanization.

Garbage Disposal

According to the officer in Calamba, there are three alternatives for garbage disposal. These are as follows; 1)"Zero waste management" 2)incinerator 3)sanitary landfill. "Zero waste management" is a kind of campaign and an effort to reduce garbage by recycling it. The scheme was originally implemented in the municipality of Santa Rosa. Though it is a very attractive scheme, implementation is not easy on a wide scale without increasing public awareness. The incinerator is the best way for garbage disposal in the long term perspective. The problems are huge construction costs and residents' opposition. Sanitary landfill is described as the most feasible way to carry out garbage disposal. Actually, LGUs have dumping sites. However, many of them remain open because filling land also costs too much to maintain. In general, garbage disposal is so expensive for LGUs with that they are unable to introduce the requisite technology. At open dumping

sites, many scavengers are engaged in garbage selection, as mentioned before.

Perspectives

Although some LGUs have the over-optimistic vision that present dumping sites will be usable for the next 50-100 years, alternative projects are being planned or implemented in some spearheading municipalities. As mentioned earlier, "Zero Waste Management" has been examined in Santa Rosa. San Pablo plans to construct an incinerator-cum-electricity generation system through the BOT scheme, to be supported by USAID. In Barangay Macabling, inhabitants managed to collect garbage as a part of the barangay development plan. They pay P10.00 a week as a contribution on a voluntary basis. Oil drums are also provided for garbage and jeepneys are lent for garbage collection. River cleaning is also done. In this way, they are struggling to manage the increasing garbage problem within their limited capabilities and not depending on overseas funds.

3.3 Transportation

Infrastructure plays an important role in supporting the resumption of urban growth and industrialization in the Philippines.

Roads, one of the most essential infrastructure elements for the promotion of economic development, is the prime mode of transportation in CALABARZON area. Jeepneys and tricycles serve as the prime means of transportation.

According to the JICA report, a basic transport system exists in the CALABARZON region except Quezon province, with relatively better standards than in other regions. The characteristics and deficiencies noted are as follows:

- The mismatches in demand and supply in a number of locations of the transport system. That is, there is insufficient capacity and sub-standard structures of the existing roads in several heavy traffic sections
- Inadequate intra-CALABARZON road transport network
- Inadequate maintenance

As observed by this working group, the existing problems especially in Laguna province are basically the same as cited in the JICA report, namely, the mismatch between road development and numbers of vehicles (Box 22) which also leads to the problems of traffic congestion (Box 29) and air pollution (Box 23). The main causes of these problems can be classified into three categories as follows:

Hardware

The "hardware" problem of transportation in the Region IV area is mainly caused by the inadequate and unbalanced road development and planning network. In the national road level, the spill-over of Metro Manila population has been increasing the volume of traffic in Laguna province. However, the national government units involved in easing the problems are implementing four main road projects to decongest Metro Manila as well as the adjacent provinces. These are the following:

- the widening of the existing Calamba - Los Baños - Bay Jct. road project
- Manila - Cavite toll expressway project (completed in Sep.1994)
- Ternate - Kabiene road project
- Laguna - Quezon - Famy road project

At the municipal and barangay road level, according to the 1991 Devolution Code, municipalities are responsible in monitoring and financing the road construction including maintenance on their own.

Another problem found is that despite the guidelines, road networks among subdivisions are not integrated with those of existing networks or with new projects because they fear that their roads might be damaged and interfered with by high volumes of outside traffic (Box 18).

Moreover, at the barangay level, due to financial constraint, roads are all one-lane partly paved with concrete. In the harvest season, the road space is utilized for grain drying, which can slow down the in-out barangay traffic.

Furthermore, the use of re-conditioned engines and the improper maintenance of jeepneys and other public vehicles because of the need to maximize profit by the owners (Box 24) are also taken into account as one of

the main causes of air pollution.

Software

Aside from the above mentioned "hardware" itself, "software" such as traffic control system and management: traffic lights and signs (which are said to be easily damaged by the heavy rainy season and floods) are hardly found in Laguna province. Traffic signals for all vehicles are manually managed by traffic policemen despite the shortage of the police force in most of the areas. For instance in San Pedro Municipality, there is only one policeman per 3,000 population. For that reason the traffic volunteers are required to guide the traffic in particular areas. Moreover, there is inadequate training and communication system for them to properly and effectively guide such heavy traffic.

One more important issue that must be mentioned here is weak regulation and law enforcement. For instance, the vehicles are improperly registered (Box 25), particularly with respect to jeepney capacity. That is, jeepneys are designed to be 8-seaters but actually are accommodating as many as 20 passengers. This results in far higher smoke emissions. This is one of the main causes of air pollution.

Humanware

"Humanware" is among the extremely important factors identified as the root of various problems obstructing development activities. Social aspects, norms such as the low awareness, individual characteristics, and the lack of discipline of both drivers and pedestrians, also induces the occurrence of the problems discussed.

Lastly, one more root problem is the weak coordination efforts among national government offices and local governmental units. This, for example, results in delays in various project studies such as road and traffic system maintenance, and consequently to the making of ineffective policies due to the improper identification of relevant problems.

4. Proposal

■ LAWLA LAGUNA 96

Looking for Alternative Waste Approach in Laguna

As mentioned earlier, the Los Baños municipal government does not have an appropriate dumping site, and this situation is the same all over Laguna Province. As population rapidly grows, more dumping sites are needed, but now it is difficult for municipality to find appropriate, safe dumping sites. The other problem is that current dumping sites are hazardous for the environment.

Hence, our working group proposes that preliminary studies on potential dumping sites in Laguna Province should be done by national level agencies.

■ Eco-stamp

The targets of this project are industries located around the lake. Though the number of the industries is smaller than other polluters like households and farmers, industrial effluents have worse effects on the environment. Therefore, first priority should be put on the industries, for maximum benefits with minimum effort.

Eco-stamp project, which gives an "eco-stamp" to environment-friendly products, can give these industries the incentive to improve their waste water treatment facilities through the market mechanism and also can enlighten a great number of consumers in the Philippines on environmental issues.

■ GARBAGE 21

Government Assistance in Rural Barangay for Alternative Garbage Education

Garbage 21 is a kind of public education on garbage treatment. In Laguna Province, people pay scarce attention to the negative effects of their own garbage. They sometimes throw their garbage anywhere (mountain, river, lake and so on) particularly in rural areas. It is important to develop not only an efficient garbage treatment system but also to increase public awareness.

Through subjects and training programs in elementary schools, pupils would enhance their awareness on the garbage problem. As well as increasing their awareness of garbage problems and learning effective techniques in school, people should put this knowledge into practice as the

situation demands.

■ JESTRON

Jeepney Stops & Road Network in Laguna

In order to decrease traffic congestion, planning and coordinating road networks, especially in the subdivisions, should be promoted. Bay areas for Jeepney (bus) stops on major roads in Laguna and in subdivisions should also be established. This project needs the coordination of related agencies, mainly in each of the municipalities. Moreover, traffic education for Jeepney / Bus drivers and passengers is also needed.

■ Jeep Cap '96

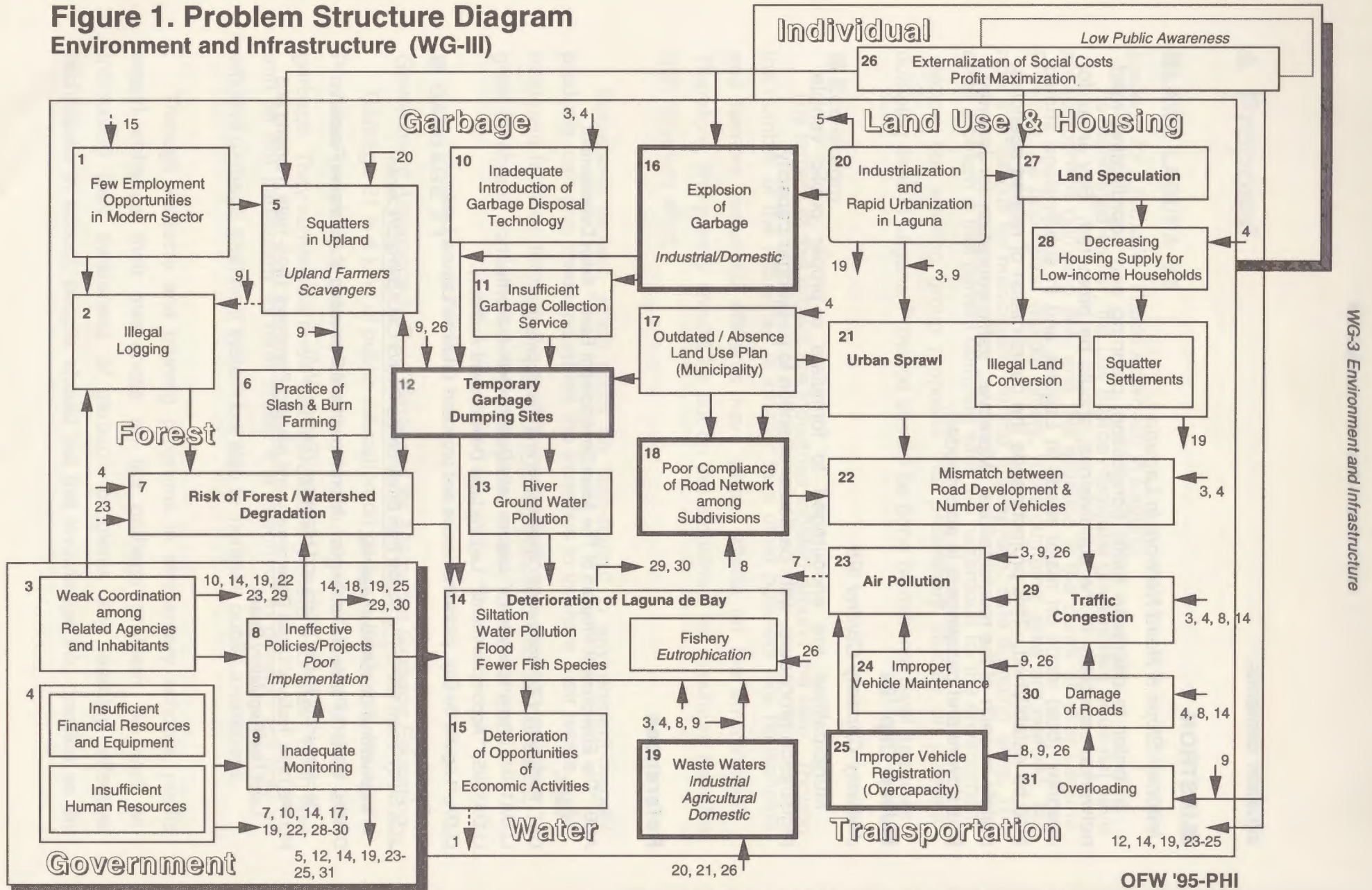
Jeepney Capacity Control '96

Municipalities are encouraged to formulate a proper public vehicle registration procedure, with particular attention to passenger capacity.

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**Figure 1. Problem Structure Diagram
Environment and Infrastructure (WG-III)**



WG-3 Environment and Infrastructure



Photo1 Low-Cost Housing/ Calamba



Photo2 Flood/ Calamba




Photo3 Jeepneys/ Calamba



Photo4 Garbage Dumping Site/ Los Baños

Table 1 Proposals of the Environment and Infrastructure Sector

Proposals	LAWA Laguna '96 Looking for Alternative Waste Approach in Laguna	Eco-stamp 	GARBAGE 21 Government Assistance in Rural Barangay for Alternative Garbage Education	JESTRON Jeepney Stops & Road Network in Laguna	Jeep Cap '96 Jeepney Capacity Control '96
Objectives	<ul style="list-style-type: none"> ■ Preliminary Study on Potential Dumping Sites in Laguna Province ■ Recommendations of Proper Dumping Sites for Municipalities 	<ul style="list-style-type: none"> ■ Rewarding Environment-Friendly Products (Reduction of Industrial Waste) ■ Raising Public Awareness on Water Pollution 	<ul style="list-style-type: none"> ■ Garbage Treatment Education ■ Enhancing Public Awareness of Garbage Collection/Disposal 	<ul style="list-style-type: none"> ■ Planning/Coordination of Road Network ■ Design/Establish Bay Areas for Jeepney (Bus) Stops 	<ul style="list-style-type: none"> ■ Control on Public Vehicle Capacity (Registration Procedure) ■ Guideline for Jeepney Operators to Realize Problems Related to Overcapacity
Target Population/Area	<ul style="list-style-type: none"> ■ Laguna Province 	<ul style="list-style-type: none"> ■ Industries around the Lake ■ Consumers (Philippines) 	<ul style="list-style-type: none"> ■ Pupils in Elementary Schools (Laguna Province) 	<ul style="list-style-type: none"> ■ Subdivisions ■ Major Roads in Laguna ■ Jeepney (Bus) Drivers 	<ul style="list-style-type: none"> ■ Jeepney Assemblers ■ Jeepney Operators (Laguna Province)
Executing Agencies	<ul style="list-style-type: none"> ■ DENR, LLDA ■ LGUs ■ Local NGOs 	<ul style="list-style-type: none"> ■ DENR, LLDA, NEDA, DTI ■ LGUs ■ NGOs 	<ul style="list-style-type: none"> ■ DENR, DECS ■ Municipalities (Laguna Province) 	<ul style="list-style-type: none"> ■ Municipalities (Laguna Province) ■ HLURB, LTO, DPWH 	<ul style="list-style-type: none"> ■ Vehicle Registration Office (Municipalities) ■ LTO
Manpower Implications	<ul style="list-style-type: none"> ■ Environmental Engineers ■ City Planners ■ Land Surveyors ■ Community Organizers 	<ul style="list-style-type: none"> ■ Mass Media ■ Illustrators ■ PR Section of Respective Companies 	<ul style="list-style-type: none"> ■ Teachers of Home Economics ■ Municipality Offices ■ Garbage Experts 	<ul style="list-style-type: none"> ■ Urban Planners ■ Technical Assistance of National/Provincial Gov't Agencies Concerned 	<ul style="list-style-type: none"> ■ Vehicle Registration Officials (Municipalities) ■ LTO Engineers ■ Jeepney Drivers' Associations
Financial Implications	<ul style="list-style-type: none"> ■ Overseas Funds 	<ul style="list-style-type: none"> ■ Normal Budgets of Respective Entities Concerned 	<ul style="list-style-type: none"> ■ Municipality and DECS Budgets 	<ul style="list-style-type: none"> ■ Municipality Budget ■ Developers Fund 	<ul style="list-style-type: none"> ■ Higher Investment Required ■ Low Maintenance Cost
Remarks	<ul style="list-style-type: none"> ■ Based on the Study, Municipalities will Select Proper Dumping Sites 	<ul style="list-style-type: none"> ■ Eco-stamp Design Contest ■ Putting the Eco-stamp on the Environment-Friendly Products 	<ul style="list-style-type: none"> ■ Training Programs are Developed by LGUs in Accordance with their Garbage Situations 	<ul style="list-style-type: none"> ■ Seminar for Private Developers ■ Traffic Ed. for Jeepney (Bus) Drivers/Passengers 	<ul style="list-style-type: none"> ■ Support from LGUs and Agencies Concerned outside the Pilot Area

Program of Working Group-3a: Infrastructure (OFW '95-PHI)

		A.M.		P.M.
September	27	Wed.	Laguna Lake Department Authority (LLDA)	Department of Environment and Natural Resource (DENR)
	28	Thu.	Department of Agrarian Reform (DAR)	Department of Tourism (DOT)
			Department of Public Work and High Way (DPWH)	
	29	Fri.		Housing and Land Use Regulatory Board (HLURB)
October	3	Tue.	Calamba Municipal Office	People's Coalition (AKLAS)
	4	Wed.	National Housing Authority (NHA)	Low-cost Housing
	5	Thu.	Lumbres Motorworks and Machine Shop	Crossing-Real Tricycle Operators Poblacion Tricycle Operators & Driver's Association
	6	Fri.	San Pedro Municipal Office	NGO (KASAMA)
	7	Sat.	Eco-tour	Eco-tour
	9	Mon.	Land Transportation Office	
	10	Tue.	Self-help Project	

Program of Working Group-3b: Environment (OFW '95-PHI)

		A.M.		P.M.
September	27	Wed.	Laguna Lake Department Authority (LLDA)	Department of Environment and Natural Resource (DENR)
	28	Thu.	Department of Agrarian Reform (DAR)	Department of Tourism (DOT)
			Department of Public Works and Highways (DPWH)	
	29	Fri.		Housing and Land Use Regulatory Board (HLURB)
October	3	Tue.	Los Banos Municipal Office	People's Coalition (AKLAS)
	4	Wed.	Community Environment and Natural Resource Office(CENRO)	Dumping Site in Mt. Makiling Forest
	5	Thu.	Industrial Estate (Ebara-Benguet, Coca Cola)	Duck Industry, Piggery
	6	Fri.	Paete Municipal Office	NGO (KASAMA)
	7	Sat.	Eco-tour	Eco-tour
	9	Mon.	Paete (Wood Carving, Taka Industry)	
	10	Tue.	San Pedro Municipal Office	Fishermen's Organization

Working Group 4**(Government Organizations)****Institutional Development****2.1. Introduction**

Development administration and finance in Laguna Province is an integral part of local government development in the Philippines. The constitutional legal basis of local government is section 1, article X of the 1987 Constitution which provides that political subdivisions of the state are the provinces, cities, municipalities and barangays. As community-based political institutions, they are closer to the people and are more effective in addressing their needs and problems. The Local Government Code of 1991 (Republic Act No. 7160) has provided a legal basis for the development of local government units (LGUs) and has assigned them a more active role in the development process. With the enactment of the Local Government Code of 1991, these institutions have the capability to play an even larger role in the development process.

Institutional Development

Development process is a continuous and evolving process. It is a process that involves the participation of all stakeholders in the development process. The development process is a process that involves the participation of all stakeholders in the development process. The development process is a process that involves the participation of all stakeholders in the development process. The development process is a process that involves the participation of all stakeholders in the development process.

The premise of the Code is devolution, meaning the transfer of certain powers and responsibilities from the national government to the local government units. The Code provides for the transfer of powers and responsibilities from the national government to the local government units. The Code provides for the transfer of powers and responsibilities from the national government to the local government units. The Code provides for the transfer of powers and responsibilities from the national government to the local government units.

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Working Group 4

Institutional Development

1. Introduction

Institutions play important roles in the pursuit of development. In the recent development decades, both Local Government Units(LGUs) and Non Governmental Organizations(NGOs) have been at the forefront of development. With the enactment of the Local Government Code of 1991, these institutions have the capability to play an even larger role in the development process.

Through the Local Government Code, various powers and functions were devolved to Local Government Units to enable them to become self-reliant and self-governing bodies as well as effective partners with the national government in development pursuits.

Another aspect of the Code, empowerment, is to be promoted through NGO participation in various levels of Local Development Councils and other LGU organized activities. NGOs have also been provided with a means to promote empowerment on both the individual and the community level.

Within this context, Working Group IV has investigated the organization, functions and the development promotion aspects of these two institutions. A summary of the problematic situations and the proposals of both working groups (IVA and IVB) are presented below.

2. Development Administration and Finance (Government Organizations)

2.1. Introduction

Development administration and finance in Laguna Province is an integrated part of local government development in the Philippines. The constitutional legal basis of local government is section I, article X of the 1987 Constitution which provides that political subdivisions of the state are the provinces, cities, municipalities, and barangays. As local governments are community-based political institutions, they are closer to the people than any other branch of the government. The primary functions of these multi-tiered local authorities are interest articulation and political representation, including socio-economic development, all designed to improve the quality of life of their constituencies.

While the constitution guarantees the existence of these Local Government Units, they perform their functions and tasks guided primarily by the provisions of the Local Government Code of 1991 (Republic Act No. 7160), the most comprehensive legal document concerning local government administration in the Philippines.

The premise of the Code is devolution, meaning the transfer of certain powers and authority from the national government to LGUs. In other words, the extent of devolved power and authority largely measures the degree of local autonomy. Local autonomy, in an ideal sense, implies that LGUs enjoy a high degree of independence in managing, deciding and planning their own administrative, fiscal and development affairs, and that the national government reduces its power over them to one of minimum supervision. The move toward local autonomy involves the recasting of highly centralized administrative structures to allow and encourage local initiatives in planning and decision making on matters which affect the community as well as enhance the technical and administrative responsibility and accountability of those who plan, decide, and implement local development projects and programs. They involve the transfer of resources, personnel, equipment and other assets from the central to the local level. On top of this is one crucial element, the transfer of power itself.

2.2. Devolution of Functions to the LGUs

Under the Code, many powers and functions have been devolved. The Code mandates the LGUs to be primarily responsible for delivering basic services and facilities such as agriculture, environment and natural resources, health, public works, public building and other facilities, social welfare and development, telecommunication, tourism, and others within their respective jurisdictions.

The Code also devolves regulatory functions to LGUs. One major regulatory function is that of the reclassification of agricultural lands which had already been classified for non-agricultural use before the enactment of the Comprehensive Agrarian Reform Law (CARL). This involves the authority to determine whether a piece of agricultural land may have greater economic value for residential, commercial or industrial purposes, a function that before the enactment of the Code was solely under the Department of Agrarian Reform (DAR).

In the area of revenue-raising power, though numerous changes have been made, much has been left unaffected. New powers generally take the form of increases in tax rates and local revenue sharing schemes (internal revenue allotment). The local tax base and taxing powers of LGUs, however, remain almost completely unaltered, for the Code retains the local tax base which the repealed local tax code (PD 231, as amended) provided.

Traditionally, local governments have managed economic enterprises or public utilities such as public markets, water works systems, the telephone system and, to a limited extent, energy generation. Under the Code, the power of local authorities to manage local economic enterprises has not only been strengthened but also expanded to include such economic schemes as build-operate and transfer (BOT) management, repair-operate and owning and others which are encouraged by existing laws. This is an area of particular interest to local authorities as more business information needs to be collected and business management techniques need to be more fully developed.

To enable the LGUs to become self-reliant, self-governing bodies, as well

as effective partners with the national government in development pursuits, the Code also created committees or other bodies to perform definite functions for the LGUs. There are five such bodies, namely, the Local Development Council(LDC), the Local Prequalification, Bids and Awards Community(PBAC), the Local School Board(LSB), the Local Health Board (LHB), and the Local Peace and Order Council(POC). Of these bodies, one that is to play an important role in local development is the LDC, the special body created to assist the sangunian(Local Government Council) in setting the direction for both economic and social development as well as coordinating the development efforts within its territorial jurisdiction. The rationale for the LDC stems from the Code's mandate requiring each LGU to formulate a comprehensive multi-sectional development plan to be approved by the sangunian.

Lastly, the Code further mandates that local chief executives take responsibility for human resource development in the LGUs. All personnel actions are to be in accordance with the constitutional provisions on civil service, pertinent laws and rules and regulations including policies, guidelines and standards set by the Civil Service Commission(CSC).

2.3. Problems of LGUs

Given these changes and challenges, Working Group IVA conducted a study of local government administration and finance in Laguna Province. The group visited various LGUs, including the Laguna provincial government and several municipalities and barangays to further understand the issues and problems LGUs are presently facing. This examination included investigation of the service delivery of such things as social forestry, cooperatives and agriculture as well as assessment of functions like planning, personnel and finance management. This investigation led to the identification of a number of problems which are administrative, financial and technical in nature. These problems, which are summarized in Figure 1, are discussed below.

Though Local Government Units in Laguna are working hard to bring about increased local development in the province, the low capacity of government organization reduce their effectiveness in this pursuit. First, this low capacity is caused by weak intergovernmental coordination for promoting integrated provincial development . There also exists a weak coordination

among National Government Agencies(NGAs) and, similarly, a weak coordination between these agencies and the LGUs. Some examples of this are a non-compliance of Memorandum of Agreement(MOA) between NGAs and LGUs, a lack of integrated planning on the provincial level, weak monitoring and evaluation systems, and unclear regulatory functions, which can be seen in the case of environmental management where there exists an unclear delineation of regulatory powers among the Laguna Lake Development Authority(LLDA) , the province, cities, and municipalities.

Another reason for low capacity is the poor delivery of devolved government services and functions. The financial resources at the disposal of the LGUs are insufficient for two reasons. The first is insufficient Internal Revenue Allotment(IRA). After devolution, IRA increased from 20% to 40%, yet in considering that LGUs must now finance devolved functions, this amount is insufficient for maintaining these functions. The second reason is inefficient local tax collection on the part of the LGUs.

In addition to this, there exists a human resource management problem. This is partly due to the nature of the current selection and recruitment system in which a number of employees are taken in not based on merit but rather on accommodation or political patronage. A further reason is the weak technical ability of employees due to insufficient training programs. Many staff members undergo training only once a year and in many municipalities employees are required to pay their own expenses for the various seminars and training opportunities offered outside of their office.

Another cause to be mentioned is weak administrative machinery. There is unbalanced staffing in the LGUs, as some offices are quite overstaffed, especially with casual workers, and some, like agricultural extension offices and tax collection departments, are very much understaffed. This unbalanced staffing stems in part from the fact that the organization is outdated, not having undergone restructuring in a number of years.

A further problem area is the improper utilization of resources. There is both an under and over utilization of manpower as well as unbalanced budget allocation for development projects, as projects with environmental implications such as waste disposal and Integrated Social Forestry(ISF) are

often given less priority, or neglected, in order to fund other types of development programs.

LGU project implementation capacity has proved to be inadequate, specifically in the areas of infrastructure development and social service delivery. In many municipalities there is no proper waste disposal system, and more support for such facilities as health care is needed.

Lastly, the present agricultural support system is inadequate. The LGU is unable to provide adequate services in the agricultural sector, especially to small farmers. Agricultural extension services are inadequate due to an insufficient allocation of operational funds by mayors. This means poor technology transfer to farmers due to a shortage of operational funds and the inability of technicians to operate extensively and effectively in the field. Furthermore, there is poor support for the organizing of cooperatives and, for small farmers, the problem is of access to credit facilities and services. There exists a system of "available yet inaccessible" credit for small farmers, resulting from, among other things, the farmers' lack of collateral and the hassle of going through the complex lending procedures of banks.

In response to the current situation of Local Government Units in Laguna Province Working Group IVA has drawn up various proposals for the improvement of local government capacity, specifically in the areas of development administration and finance. These proposals are discussed in detail in Section 5 below.

3. Roles of NGOs in Development

3.1. Introduction : NGO Functions

NGOs are considered to be one of the most important actors in the implementation of development in the Philippines. Both the 1987 Constitution, drafted by the Aquino government, and the Local Government Code of 1991 stress the importance of Non Governmental Organizations(NGOs). The Code even goes on to state that Local Government Units shall promote the establishment and operation of Peoples Organizations(POs) and NGOs to

become active partners in the pursuit of local autonomy.

The term NGO includes a wide range of organizations, from business organizations to religious groups. Yet for the purpose of this study, NGO is defined as follows: a private voluntary organization, a social development agency, or an organization not belonging to government.

There are six main functions of NGOs. The first is that of a resource provider and mobilizer, providing and mobilizing resources through credit assistance, marketing transactions, human resource training, livelihood mobilization and savings mobilization. Second is that of a proponent developer, helping to create and strengthen effective local organization capable of planning, implementing and sustaining development activities, such as the establishment of cooperatives through community planning. The third is that of a technology developer and disseminator, working to increase productivity and reduce costs by increasing the income of target beneficiaries. The fourth function of an NGO is that of a research and information provider, contributing to planning as well as implementing and monitoring development activities. The fifth is networking, contributing to the exchange of such information as technology or marketing data. These functions, along with the sixth, advocacy, empowering poor people to become actors in development, make the NGO an important player in development activities.

3.2. Activities of NGOs in Rural Development

Rural development is the process of transforming the poverty sector into a better quality of living. Many NGOs engaged in rural development promote cooperatives or Grameen Bank type NGOs. Their major activities include such things as promotion of income generation, delivery of social services, community organization through credit assistance, livelihood projects and micro-enterprise supply of farm inputs and training, the most important project among these being non-collateral credit assistance for members.

In the case of Grameen Bank type NGOs, the objective is to provide loan access to the poor, especially women, in order to start small scale enterprises. Before being allowed to borrow money, the members must be trained, and they must also present a detailed account of how they plan to use borrowed funds. The system is very strict, as money lent must be repaid weekly. The

cooperative system, on the other hand, is less strict. Members are able to borrow money not merely for starting new enterprises but for a variety of purposes. Cooperatives also provide many market related services such as purchasing rice from farmers, selling fertilizer, allowing farmers use of the cooperative owned rice mill, warehouse, dryer, etc. In addition, they also provide management training, leadership training and planning training for their cooperative members.

As for evaluation, many primary NGOs are small and act individually. The rate of repayment for Grameen Bank type NGOs is high, at about 95%. Most members can raise their income through small scale enterprises. As they continue to grow and become successful, more and more institutions begin to support them and financially encourage their small-scale enterprises.

3.3. Problems of NGOs

Working Group IVB visited numerous NGOs/POs including development NGOs/POs to investigate their role in Laguna province. Focusing on poverty alleviation in rural areas, this investigation examined the activities of these NGOs/POs and their development roles. It also led to the identification of the following problems.

In the rural areas of Laguna, NGO activities are focused on the income generation of weak people such as small farmers, women or the poorest of the poor. It is difficult for government to support such people individually, thus the NGO role in rural development is definitely important. Still, NGOs have some problems, the most fundamental being a shortage of funds which, in turn, leads to an insufficient number of staff members and inadequate facilities. Due to this fact, NGOs cannot provide adequate services for their beneficiaries.

Also, because of the weak marketing system in the Philippines, low-level post harvest facilities, a lack of market information, transportation difficulties, etc., NGOs and their beneficiaries cannot provide their products efficiently. This means a lack of competitiveness of products and a loss of profits in the end.

To solve these problems, it is important to promote a collaboration among

NGOs. Yet, in the Philippines, there are few organizations to coordinate NGO activities as an integrative authority or as an information exchange center. Furthermore, NGOs tend to act independently, meaning that their activities are limited to the small group level.

As for the GO-NGO collaboration, some NGOs do better with government support, especially financial support, and information. Though some technical support to NGOs from the government exists and the Local Government Code of 1991 provided for GO-NGO collaboration with the Local Development Council, there are still many problems in the GO-NGO relationship. (These problems will be referred to later in this report.)

As mentioned above, though there are numerous difficulties which must be overcome in order to make NGO activities more effective, NGOs do play an important role in helping poor people who wish to improve their livelihood. Working Group IVB has constructed a list of proposals for increasing NGO effectiveness in their activities. These proposals are presented in Section 5 below.

4. GO-NGO Relationship

Before the enactment of the Local Government Code of 1991 (Republic Act No. 7160), many NGOs/POs were performing development work without any financial or technical assistance from either the national government or local governments. Government officials seemed uninterested in cooperating with NGOs/POs and NGOs/POs were impatient with the bureaucracy.

However, as can be seen in the integrated problem structure diagram presented in Figure 1, the low level of government support to NGOs/POs directly influences the insufficiency of marketing services, the minimal access to information among NGOs/POs and the low level of training. Therefore, this low level of government support has a direct impact on the livelihood of the rural poor in terms of insufficient rates of return to these marginalized people and low competitiveness of their products.

In 1991, the Local Government Code was proclaimed. The Code calls for democratization of the decision-making process through the participation of NGOs/POs. Further, utilization of the NGOs/POs' network or information is expected. According to section 34 of chapter 4 of the Code, LGUs are to promote the establishment and operation of NGOs/POs to become active partners in the pursuit of local autonomy. Moreover, according to section 107 of title six of the Code, no less than one fourth of the members of the Local Development Council (LDC) shall be composed of NGOs/POs representatives.

Since the implementation of the Code in 1991, some cooperatives have accepted technical and training assistance from the Department of Agriculture. However, some reasons for NGOs/POs unwillingness to cooperate with the government remain. For example, the decision-making process of government still tends to be a top-down approach, which some NGOs/POs feel to be different from their style. Also, many NGOs/POs are still impatient with the bureaucracy. Even in the LDC, mayors tend to choose NGOs/POs representatives with which they have links rather than those which fully represent the local NGO community. Therefore, because of the limited number of NGOs/POs members and the existence of close links between mayors and the local elites, effective LGU and NGOs/POs collaboration through the LDC has yet to be fully realized.

5. Proposals

Responding to the various problems which have been identified and discussed above, Working Group IV recommends the following:

■ Strengthening coordination between NGA and LGUs

Though the Local Government Code mandated LGUs to be partners of NGAs in local development, this has yet to be realized. Thus, the strengthening of coordination between the two is proposed, the objective being to establish a coordinating committee comprised of both NGA and LGU officials in order to realize an integrated development approach for Laguna Province. As this is to be a provincial based committee, the provincial government is to be the executing agency.

■ Provincial Revitalization

There is a need for a reorganization of the local bureaucracy, especially now since devolution, in order that it function more efficiently. Under this provincial revitalization, not only are LGU functions to be revitalized but administrative and technical training is also to be provided to increase the effectiveness of government personnel. NGAs, specifically the Department of Interior and Local Government(DILG) and the Civil Service Commission(CSC), are to take the lead in staff training and the LGUs are to bear the responsibility of this training coordination.

■ Revenue Generation

Revenue generation is the principle component of self-reliance and self-government, one of the premier aspects of the Code. Still, there is clearly a need for more revenue generation on the part of the LGUs. Thus, a strengthening of tax collection efficiency on both the national level to increase IRA, and on the local level by, for example, periodic updating of the local tax maps, is proposed. In addition, there is a need to strengthen the political will of the LGUs to use the new tax powers granted under the Code and for the LGUs to move toward revenue generation from non-traditional or newly devolved sources (i.e. BOT, credit financing). A proper monitoring system must also be implemented to help curb corruption.

■ Efficient and Effective Service Delivery

It is clear that though various service functions were devolved through the Local Government Code, most have not proven successful due to, among other things, a lack of funds and personnel. Thus, a move for more efficient and effective service delivery is needed. This is to be realized through an IRA increase to the LGUs, a mechanism to ensure that all devolved programs receive the funding and staff necessary to function properly and are not be neglected due to the priority of other types of development projects, as well as an in-house monitoring system and technical training for personnel, both of which are to be coordinated by the appropriate National Government Agencies.

■ Agricultural Support Mechanism

In considering that many parts of Laguna are still predominantly agricultural and that many small farmers have no access to agricultural credit

and limited access to other support mechanisms, this proposal calls for an agricultural support mechanism in the form of a collaborative effort on the part of the LGU, DA, the Land Bank and cooperatives to extend credit and training to small cooperatives, farmers associations and individual farmers through cooperatives. The government should recommend that credit be provided by the Land Bank to cooperatives, which would in turn lend to the above mentioned groups or individuals. Furthermore, a comprehensive training system must be developed under the organization of the DA regional office in coordination with the provincial agricultural office to extend training to provincial, municipal, NGO, PO and agricultural college technicians. All trained technicians are to be registered with the province, and cooperatives are to be charged with direct agricultural technical assistance to farmers.

■ Integration of Cooperatives

In order to make Cooperative activities workable, efficient and effective, it is necessary to strengthen the linkages among Coops. CDA(Cooperative Development Authority) and NATCCO(National Confederation of Coops, Inc.) exist as cooperative integrative institutions. However, their integrative function seems to be weak. It is necessary to vitalize 2-3 tiered coops. If coops can cooperate, they will be able to use economy of scale and exchange information as well as utilize resources more effectively and efficiently.

■ Promotion of Rural Private Enterprises

Financial support by coops and NGOs is mainly targeting individuals. In order to increase productivity or income, rural enterprises must be supported by NGOs or banks. By promoting rural enterprises, individual business activities will improve and in turn be organized into group businesses such as garment factories, slipper makers or agro-industries.

■ Rural Bank/Land Bank and Coops Collaborative Work on Management Capability Building

In Japan, there is a system to support small and medium sized enterprises by banks in order to build mutual trust. Cooperation between the Land Bank or rural banks and cooperatives is necessary to improve the management and financial stability of cooperatives.

■ Proper Representation of NGOs to the Local Development Council(LDC)

In strengthening the voice of the people, it is necessary to establish standard criteria for selecting NGO representatives to the LDC, with the selection procedure being not in the hands of the LGUs but the NGOs themselves. In addition, it is necessary to devise a system which guarantees freedom from political influence of LDC members.

■ Establishment of NGOs/POs Data Center

The Security and Exchange Commission(SEC) works as the registration institution for NGOs. However, there are few institutions which provide information on such things as technology or marketing data for NGOs. Thus, in order to strengthen the linkage among NGOs, it is necessary to establish an information center.

6 .Conclusion

The potential of institutions to promote development is determined by their capability and the problems and issues they confront in the process of managing development. Through our research, we have found that institutions operate not in isolation, but rather as a part of a bigger system, in a larger context. Cooperative undertakings, coordination and integration are integral components for the effective pursuance of development. Thus, the potential to promote development, through coordination and integration, by the institutions we examined must be strengthened further. The proposed reforms of Working Group IV include, among others, organizational, fiscal, human resource and structural reforms. We believe these proposals will serve to strengthen the above mentioned institutions both independently and collaboratively, allowing them a greater and more credible role in local development.

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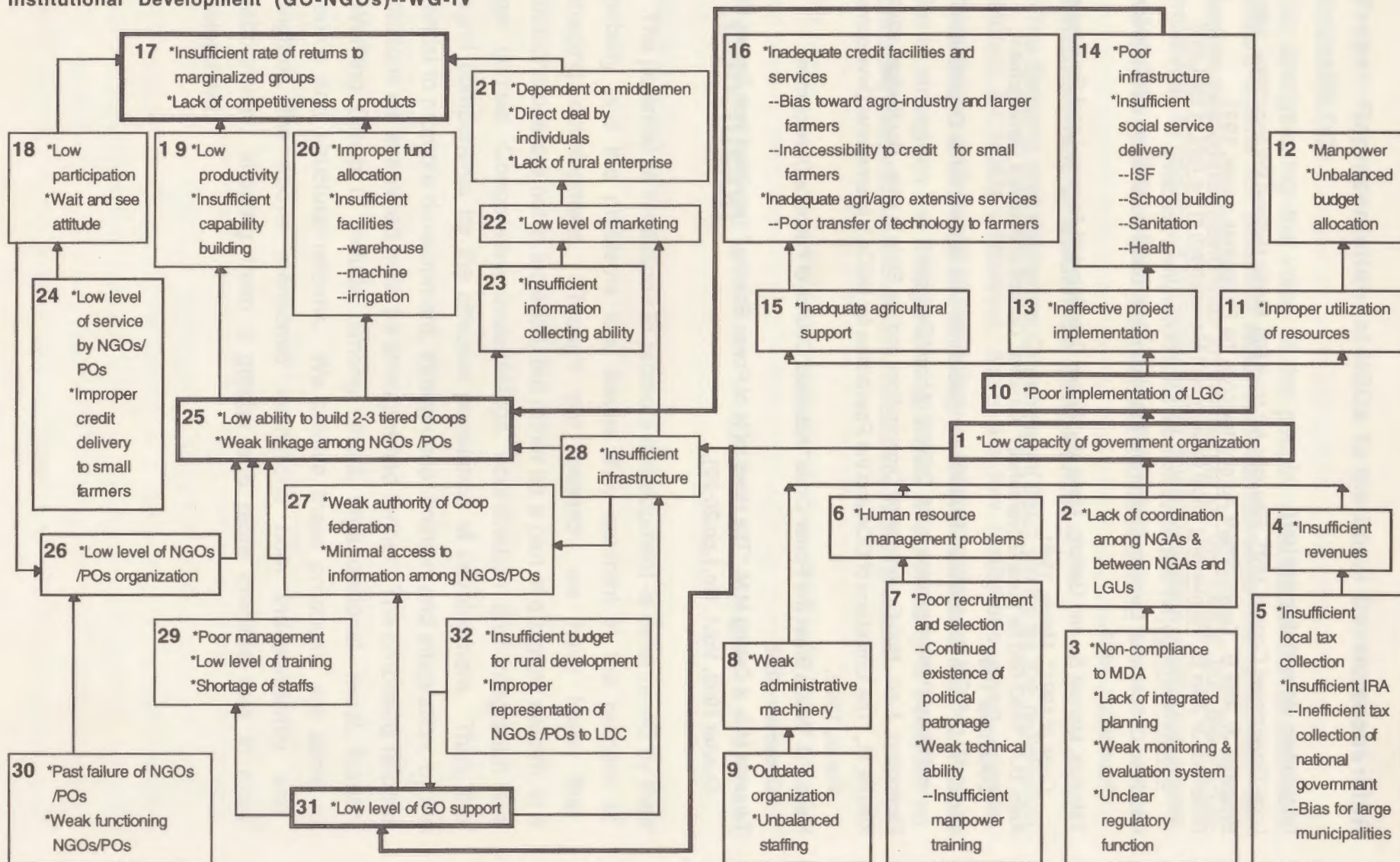
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Figure 1. Problem Structure Diagram
Institutional Development (GO-NGOs)--WG-IV



WG-IV : Institutional Development

Table 1 A Proposals : WG-IV--Governmental Organization

<i>Proposals</i>	Strengthening coordination between NGA and LGUs	Provincial Revitalization (reorganization)	Revenue generation	Efficient and effective service delivery	Agricultural support mechanism
Objectives	To establish a coordinating committee composed of NGA and LGU officials for realization of an integrated development approach to Provincial Medium Term Plan	To realign functions of LGUs and provide administrative and technical training to increase effectiveness	Strengthen political will to use new taxing power and strengthen collection efficiency To help NGUs generate revenues from non-traditional sources	To provide adequate service delivery through increased IRA, a safety-net for devolved programs, constant monitoring and administrative and technical training for personnel	To coordinate local government and DA for cooperatives to provide credit and training to small cooperatives, farmers associations and individual farmers
Target Population/ Area	Local Government Unit	Local Government Unit	Local Government Unit	Local Government Unit	Small farmers
Executing Agencies	Provincial government (LGU)	Local Government Unit	<ul style="list-style-type: none"> ● Local Government Unit ● Local Development Council ● National government 	Local Government Unit	<ul style="list-style-type: none"> ● Department of agriculture ● Provincial government ● Cooperatives
Manpower Implications	<ul style="list-style-type: none"> ● National agency staff ● LGU staff 	<ul style="list-style-type: none"> ● Local Government Unit ● National Government Agencies 	<ul style="list-style-type: none"> ● LGU staff ● National government staff 	<ul style="list-style-type: none"> ● LGU staff ● National government staff 	<ul style="list-style-type: none"> ● Department of agriculture staff ● Provincial government staff ● Agricultural technicians
Financial Implications		<ul style="list-style-type: none"> ● LGU funds 	<ul style="list-style-type: none"> ● National government funds ● LGU funds 	<ul style="list-style-type: none"> ● NGA funds ● LGU funds 	<ul style="list-style-type: none"> ● Department of agriculture funds ● LGU funds
Remarks	Willingness of National Government Agencies to attend meetings is a crucial element to success	<ul style="list-style-type: none"> ● NGAs(DILG & CSC) should take the lead in staff training ● LGUs should be the training facilitator/coordinator 	Efficiency to be increased through a proper monitoring system and provide updating of LGU tax maps Revenue generation from non-traditional sources such as BOT, credit financing, etc.	<ul style="list-style-type: none"> ● Amend the LDC to increase IRA to LGUs ● Monitoring to be conducted by NGAs 	<ul style="list-style-type: none"> ● Training to be coordinated through the provincial agricultural office and extended to LGU, PO, NGO, agricultural collage and technicians ● All agricultural technicians will be registered with provincial agriculture office

WG-IV : Institutional Development

Table 1B Proposals : WG-IV--Non Governmental Organizations

Proposals	Integration of Cooperatives	Promotion of Rural Private Enterprises	Rural/Land Bank -Coops Collaborative Work on Management Capability Building	Proper Representation of NGOs to the LDC (Local Development Council)	Establishment of NGOs /POs Data Center
Objectives	<ul style="list-style-type: none"> To establish strong linkage among coops for efficient and effective implementation of development programs 	<ul style="list-style-type: none"> To increase productivity or income To make more competitive products To earn more profits 	<ul style="list-style-type: none"> To improve management system of Coops To build mutual relationship between Rural/Land Bank and Coops 	<ul style="list-style-type: none"> To establish standard criteria for selecting NGOs representative to the LDC To voice out people's needs through NGOs 	<ul style="list-style-type: none"> To strengthen linkage among NGOs/Pos through exchange of substantive and necessary information (technology, marketing data, etc.)
Target Population/Area	<ul style="list-style-type: none"> All types of coops 	<ul style="list-style-type: none"> Poverty sector women 	<ul style="list-style-type: none"> Coops Rural/Land Bank 	<ul style="list-style-type: none"> LDC NGOs 	<ul style="list-style-type: none"> NGOs/POs
Executing Agencies	<ul style="list-style-type: none"> CDA NATCCO Local government Coops themselves 	<ul style="list-style-type: none"> NGOs/Coops engaged in community organizing and business orientation 	<ul style="list-style-type: none"> Rural bank or Land bank Local government Coops 	<ul style="list-style-type: none"> National government Local government 	<ul style="list-style-type: none"> NGOs/POs themselves SEC(Securities and Exchange Commission)
Manpower Implications	<ul style="list-style-type: none"> CDA officials Staffs of related coops 	<ul style="list-style-type: none"> Business managers of NGOs/Coops Business organizing consultants/experts Rural entrepreneurs Village/Barangay officials 	<ul style="list-style-type: none"> Local government officials Managers of Rural/Land Banks Executive directors of Coops 	<ul style="list-style-type: none"> National government officials Staffs of LGUs Presidents of NGOs 	<ul style="list-style-type: none"> Presidents and staff of NGOs/POs SEC officials
Financial Implications	<ul style="list-style-type: none"> Government funds Coops funding contributions 	<ul style="list-style-type: none"> Overseas funds Rural/Land Bank Commercial banks 	<ul style="list-style-type: none"> Rural/Land Bank budget Local gov't funds Coops' contributions 		<ul style="list-style-type: none"> Government funds Overseas funds NGOs/POs contributions
Remarks	<ul style="list-style-type: none"> Economy of scale Information exchange and resource complementation Harmonization of Coops relationship 	<ul style="list-style-type: none"> Transforming individual business activities to group business activities Resource sharing Team building 	<ul style="list-style-type: none"> Execution of memorandum of agreement 	<ul style="list-style-type: none"> To select NGOs' representatives to the LDC by themselves Avoid political affiliation 	<ul style="list-style-type: none"> Information exchange among NGOs/POs Close relationship among NGOs/POs Updated information links

Program of Working Group-4a: Government (OFW '95-PHI)

			A.M.	P.M.
September	27	Wed.	Sta. Maria Municipal Office	Sta. Maria Municipal Office
	28	Thu.	Siniloan Municipal Office	Siniloan Municipal Office
	29	Fri.	Sta. Maria Municipal Office	Sta. Maria Municipal Office
	30	Sat.	CEC, UPLB (Briefing by NGOs)	CEC, UPLB (Briefing by NGOs)
October	3	Tue.	Sta. Cruz Provincial Office	Sta. Cruz Provincial Office
	4	Wed.	Sta. Cruz Provincial Office	Sta. Cruz Municipal Office
	5	Thu.	Rural Bank	Pasig, Rizal Agricultural Credit Policy Council (ACPC)
	6	Fri.	Asian Development Bank (ADB)	The National Confederation of Cooperatives (NATCCO)
	7	Sat.	Dayap, Calauan Cooperative under NATCCO	Dayap, Calauan Cooperative under NATCCO
	9	Mon.	Calamba (Cooperative Development Authority Region IV Office)	Calamba (Cooperative Development Authority Region IV Office)
	10	Tue.	Agro Forestry	Agro Forestry

Program of Working Group-4b: NGOs (OFW '95-PHI)

			A.M.	P.M.
September	27	Wed.	Sta. Maria Municipal Office	Sta. Maria Municipal Office
	28	Thu.	Siniloan Municipal Office	Siniloan Municipal Office
	29	Fri.	Sta. Maria Municipal Office	Sta. Maria Municipal Office
	30	Sat.	CEC, UPLB (Briefing by NGOs)	CEC, UPLB (Briefing by NGOs)
October	3	Tue.	San Pablo, (Center for Agricultural and Rural Development (CARD))	CARD Chapters
	4	Wed.		CARD Chapters
	5	Thu.	Rural Bank	Pasig, Rizal Agricultural Credit Policy Council (ACPC)
	6	Fri.	Asian Development Bank (ADB)	The National Confederation of Cooperatives (NATCCO)
	7	Sat.	Dayap, Calauan Cooperative under NATCCO	Dayap, Calauan Cooperative under NATCCO
	9	Mon.	Calamba (Cooperative Development Authority Region IV Office)	Calamba (Cooperative Development Authority Region IV Office)
	10	Tue.	Agro Forestry	Agro Forestry

Integration and Policy Direction: Synthesis

Hiroshi Kakazu
Project Director

1. Methodological Problems

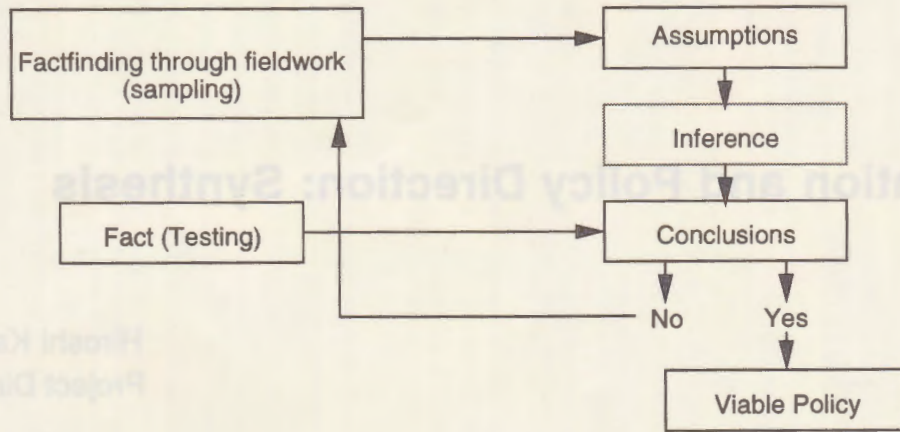
How do we identify development problems?

This section attempts to integrate development problems and possible solutions identified in the foregoing four sections. Before we venture into integration, we need ourselves to question about how we have identified problems and how we have derived solutions. If our method of identifying problems are based on biased assumptions and concepts or biased sampling, then our conclusions and policy implications based on identified problems are also considered to be biased and wrong. It is always true that policy prescriptions based on wrong assumptions and wrong sampling are worse than nothing.

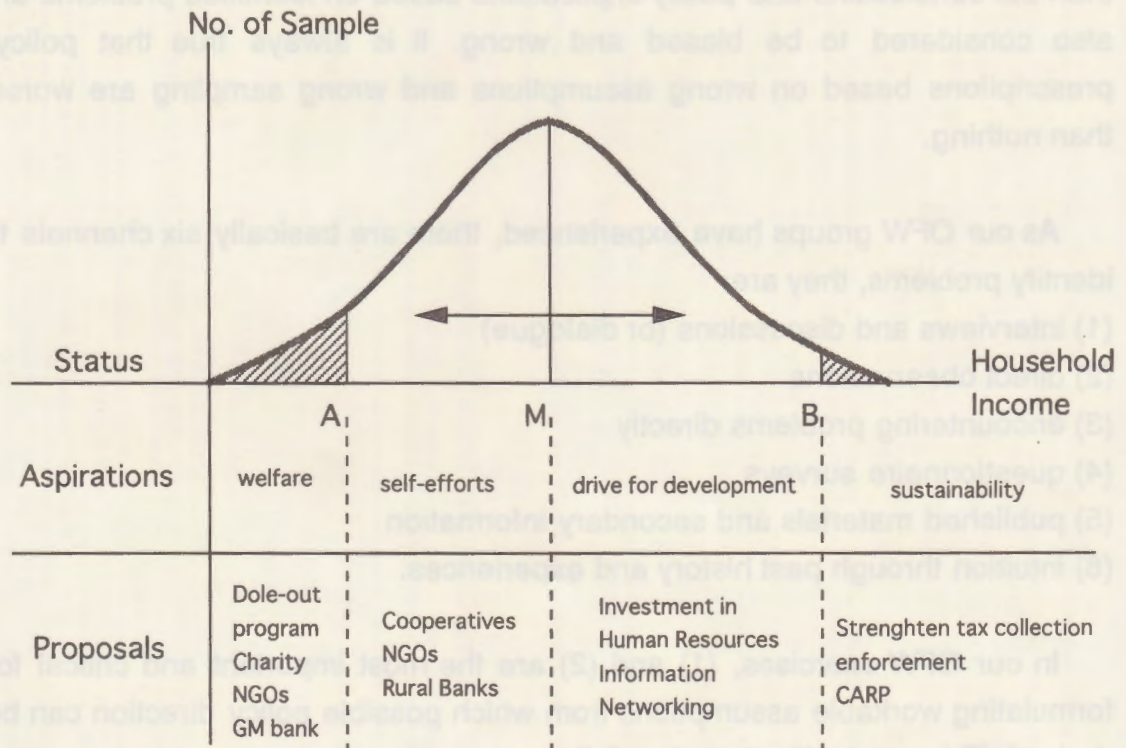
As our OFW groups have experienced, there are basically six channels to identify problems, they are:

- (1) interviews and discussions (or dialogue)
- (2) direct observations
- (3) encountering problems directly
- (4) questionnaire surveys
- (5) published materials and secondary information
- (6) intuition through past history and experiences.

In our OFW exercises, (1) and (2) are the most important and critical for formulating workable assumptions from which possible policy direction can be derived. This can be illustrated as follows:



There are two possible ways that we may end up with the wrong conclusions. One is "error of omission," that is to say an error excluding a large body of households from sample survey or interviews. This can be illustrated from a particular barangay sampling survey in the following diagrams:



If we sampled only a few households which belonged to the poorest group A in the barangay, then our analysis, derived conclusions and proposals will be quite much different from the unbiased sampling as is illustrated in the diagram. This will tell us that the sample size must be adequate to approximate the above normal curve and they must be taken at random without the influence of the barangay captain and our counterparts. My reasonable hunch is that most samples taken at various barangays are biased because of arbitrary selection of sampled households.

The second error is arising from "logical inference" from given assumptions. We often heard that private moneylenders in a poor barangay were exploiting small, poor farmers through imposing exorbitantly high interest rate. This kind of conclusion, quite often, is based on false assumptions and inference (analysis). A simple financial theory tells us that high interest rate reflects high lending risk (or high default rate) and high transaction costs. As a survey conducted by the Agricultural Credit Policy Council (ACPC) reveals, small, poor farmers usually do not possess viable collateral to secure loans and their default rates are very high compared to borrowers in the formal financial sector. We should realize that the private moneylenders are the last resort for those small, poor farmers who cannot be taken care of by formal banking sector because of their lack of collateral and credit worthiness. Of course, there are always some moneylenders whose business practices are out of social norms, particularly when they are in dominant positions in a village community. Therefore, policy direction is not to abolish the private moneylenders, but to bring these needy farmers to cheaper, safe, and formal credit facilities. Like moneylenders, merchandising middlemen are also, quite often, targeted as undesirable, exploitative actors in the poor community. Before we conceive such false assumptions, we should ourselves question the role and rationale of these moneylenders and middlemen in the poor, informal community.

Another example of this kind of inference error was the industrialization through import-substitution policies which devastated Philippines' rural development as well as the urban industrial sector. It seemed logically appealing when a policy maker said 'we need to substitute our own domestically produced consumer products for imported ones to generate more job opportunities as well as saving our precious foreign exchange.' The policy

consequence was completely opposite. In order to substitute imports, they needed to import expensive, labor-saving capital goods which absorbed less labor while creating more trade deficits which in turn led to mounting foreign debts. Protected factories were burdened by underutilization of their productive capacity because there was not enough domestic demand for their products due mainly to stagnated labor income, while their products were priced out of international markets.

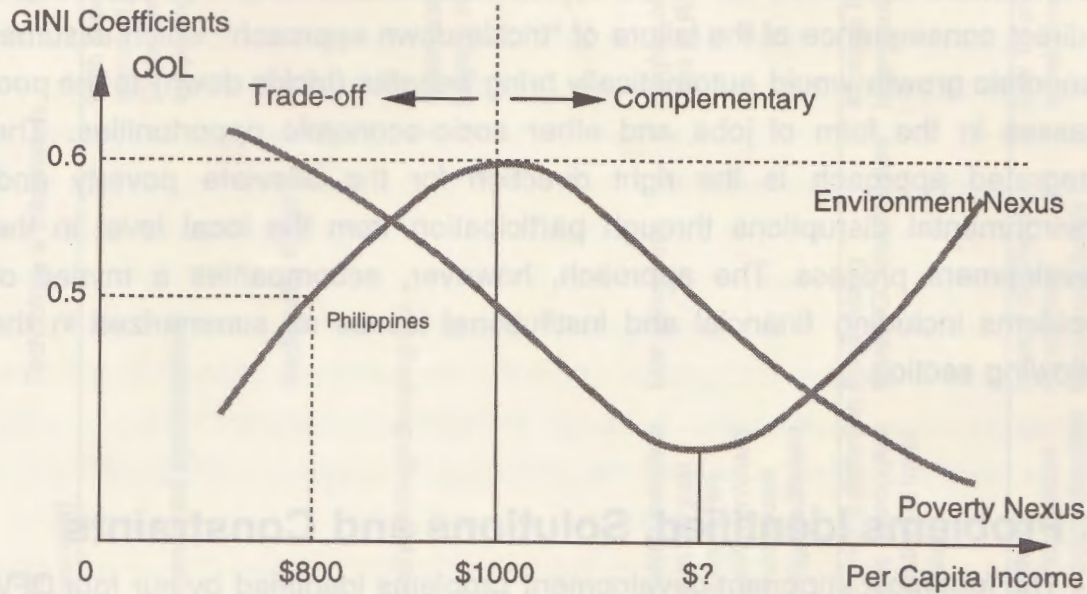
2. Why Do We Need Integrated Approach?

An ADB Project Economist, Mr. Masahiro Otsuka, who briefed our OFW group on Integrated Rural Development Project (IRDP), justified the integrated approach because nobody wants "disintegration." Of course, this is not the genuine reason. We need an integrated approach because development goals or objectives have multi-faceted dimensions, and they cannot be addressed by single discipline. Furthermore, what is critically important is a possible trade-off between development goals. Take, for example, the Medium-Term Philippine Development plan (MTDP) for 1993-1998 which listed following four important goals of the goals:

- (1) growth of real per capita income
- (2) environmental conservation (sustainable development)
- (3) poverty alleviation (social equity)
- (4) peoples' empowerment (participatory development).

These goals are also carried in local development plans.

Nobody would dispute these ideal goals. The problem, however, is whether these objectives are mutually consistent with one another or not. Take, for example, the relationships between growth of per capita income, poverty alleviation and environmental conservation. Simon Kuznets had empirically "discovered" a long time ago that here was an unavoidable trade-off between the growth of per capita income and income distribution (social equity) in the early stage of development process as is shown in the following diagram.



If we take per capita income on the horizontal axis and Gini coefficients on the vertical axis as to measure the degree of income inequality, the "Poverty Nexus" indicates that there might be a trade-off between them until the per capita income reaches to \$1000. Since nominal per capita income of the Philippines is about \$800 in 1993, promoting economic growth might deteriorate its income distribution. The same relationship may hold true between the growth rate of per capita income and environmental conservation as is indicated in "Environment Nexus." It is also an interesting subject to examine whether there is any trade-off between economic growth and peoples' empowerment. If answer is "no", then economic success stories in the Asian NIES under the authoritative politico-economic system cannot be justified. The reason behind these possible trade-offs is not difficult to understand. In the initial stage of development process, rapid capital accumulation and investment are required to raise per capita income which normally takes place at the expense of fair income distribution and environmental conservation. As per capita income reaches at the certain level, however, the growth rate is constrained not only by growing social and environmental imbalances, but also by changes of peoples' consciousness about development process.

The integrated approach has been adopted in the Philippines rural

development to achieve the above objectives simultaneously. The approach is a direct consequence of the failure of "trickle-down approach" which assumes economic growth would automatically bring benefits (trickle down) to the poor masses in the form of jobs and other socio-economic opportunities. The integrated approach is the right direction for the alleviate poverty and environmental disruptions through participation from the local level in the development process. The approach, however, accompanies a myriad of problems including financial and institutional issues as summarized in the following section.

3. Problems Identified, Solutions and Constraints

The four most important development problems identified by our four OFW groups for the Laguna Province are summarized in the following table in accordance with "problems priority."

Group 1:

- (1) high dependency on imported capital goods
- (2) heavy external debt
- (3) underdeveloped supporting industries
- (4) underdeveloped agro-industries.

Group 2:

- (1) heavy financial burden
- (2) insufficient teacher training
- (3) inadequate IECM (Information, Education, Communication, Motivation)
- (4) unutilized H/R. (Human Resource)

Group 3:

- (1) incomplete land use plan
- (2) traffic congestion and pollution
- (3) temporary garbage dumping site
- (4) deterioration of Laguna de Bay

Group 4:

- (1) poor coordination among Government agencies
- (2) weakness of coop finance
- (3) crisis of decentralization
- (4) over-expansion of coop across the board.

Identified Problems, Causes, Solutions and Constraints

Characteristics of Problems

Problem Priorities	Identified Problems, Causes, Solutions and Constraints					
	Finance	Institution (Inc. Gov't & Non-Gov't)	Human Resources	Policies (Management)	Technology & Information	Others
WG-1 Agriculture Non-Agriculture	1 2 3 4	Mounting external debt			Underdeveloped agro-industries	High dependency on imported capital goods Underdeveloped supporting-industries
WG-2 Education Health	1 2 3 4	Excess financial burden on DECS, DOH	Limited teacher training		Inadequate IECM	
WG-3 Infrastructure Environment	1 2 3 4		Incomplete land use plan T. congestion & pollution		Temporary garbage dumping site	Deterioration of Laguna de Bay
WG-4 Institution Empowerment	1 2 3 4		Coordination with gov't development plan			
Causes of Problems		Weakness of coop finance Crisis of decentralization policies	Expansion of coop across the board			
		Lack of funds for small farmers/Low saving rate/High D/S ratio/Devolution may cease to function due to lack of funds.	Inability of PG to draft its own DP through coordinating municipal and national plans Limited financial support Organizational weakness of coop.	Poor W. conditions Limited formal job opportunities	Ill-conceived industrial policies in the past Distortions in Res. allocation/Overvalued pesos/Inadequate monitoring/Insufficient H/R	Low awareness Neglect of CG ind. Lack of R/D
Solutions short-mid term long term		CB, RB are too big to finance small farmers. Credit through coop ODA/Tax collection/ Exports	NP needs to coordinate with PG and municipalities/Institute IADP/Nationwide association of coop	Overseas employment Creation of domestic jobs	Correct pricing distortion Dismantle monopolies Liberalization of trade (agri inputs)	Fund raising More NGO involvement Increase local contents by promoting SME.
Constraints		Can IRA be increased immediately? Ability of tax collection Misallocation of funds Decentralization	Possible sabotage for National agencies interventions Difficulties in coordinating diversifying coop.	Low economic growth	Rent-seeking lack of coordination/ Unclear policy direction	Legacy of Church Superstition Inadequate family planning/Weak LGU policies Low TT and R&D development

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Integration and Policy Direction: Synthesis

These problems are obviously interrelated. External debts, which are brought out by high dependency on imported capital goods, are major cause of heavy financial burden on all sectors of rural communities which have been deprived of their capacity for development both in human and natural resources and institution building.

Each OFW group was requested to find out major causes of the identified problems according to the development agenda listed on the top of table. A lack of funds and weak institutional capability as well as ill-conceived policies are major causes of problems. Although possible solutions to these problems can be easily spelled out such as providing adequate funding facilities, strengthening institutional capability, tax collection, NGO participation, promotion of exports and SMEs and correcting various market distortions, etc., actual implementations of these measures is entirely a different story. This is where our frustration creeps in. There are multitude of constraints for the solutions such as historical legacies, rent-seeking activities, poor organizational systems which cannot be removed with one stroke of the ax. After all, development process is time- as well as space-bound. In view of the long-run perspective, policy direction to remove these constraints is utmost important in the context of the Laguna Province.

4. ODA

Promote self-help or create dependency syndrome?

Effectiveness of ODA in achieving development objectives was discussed intensively in the course of our OFW exercises, ODA in the Philippines has been justified on the two grounds (aside from humanitarian reasons). One ground is to supplement a shortfall of domestic savings which have been far below of required domestic investment. The other ground is to supplement foreign exchange shortage.

Assuming, for simplicity, all capital inflows are in the form of ODA, the required capital for development can be expressed as follows:

$$\text{ODA} = \text{domestic investment (Id)} - \text{domestic investment (Sd)}.$$

Let us assume the following parameters for the Philippine economy based on

MTDP:

domestic saving rate (sr) = 20%

capital-output ratio (k) = 3%

required GDP growth rate (g) = 8%.

Then the following formula will give the required ODA/GDP ratio which will be translated in turn into the amount of ODA needed:

$$g=8 = \frac{(sr=20) + (ODA/GDP = ?)}{k=3}$$

$$ODA/GDP = kg - sr = 4\%.$$

Therefore ODA required for 1994 is \$2,245 million (4% of GDP).

As far as I know, almost all development plans in the Third World have based their calculations for external sources of development finance on this simple formula. The Philippines is no exception. The formula can be used for both national as well as regional plannings. What wrong with this formula? A major problem will be a possibility of trade-off between domestic savings (Sd) and ODA which has been observed in many small island economies. In this case, ODA would be substituted for domestic savings instead of complementing it as the model implicitly assumed. We do not know yet whether or not there is a trade-off in the Philippines or in the Laguna Province. It is surely worthwhile to investigate the matter. If there is evidence of a trade-off between ODA and Sd, then ODA does discourage the self-help efforts of the people as many cause-oriented NGOs have voiced for.

The way ODA is disbursed in the Philippines should be modified so as to focus more on human resources development and institution building instead of concentrating on infrastructure needs. But I must question the wisdom to disbursing all ODA funds through POs or NGOs as some advocates proposed. It is up to the democratically elected national government whether or not ODA funds should be disbursed through NGOs or POS. If, for example, the Japanese government attempts to directly aid the poor farmers through NGOs in the Laguna Province, there is a clear and unexcusable act of foreign intervention into the country's domestic affairs which must by all means be avoided.

5. For Further Improvements of OFW

We have concluded the OFW-PH'95. This was the fourth OFW followed by Cavite in the Philippines (third) and Thailand (first and second). It is time, I believe, to assess ourselves, like any other projects to determine, whether or not the OFW exercise has been a success or failure. Even if it has been a success story, as I firmly believe it is, we need to work toward further modifications and improvements.

The basic idea of OFW is to provide GSID students (not only Japanese students) with a means to learn or unlearn about development issues through students-initiated, action-oriented fieldwork, and let them think of feasible solutions to the identified problems in a multidisciplinary or transdisciplinary fashion. Development problems are multifaceted and highly interrelated one another, so that our OFW participants' backgrounds have also been multidisciplinary in nature. The multidisciplinary approach, however, is easy to say than actual implementation. How can we expect students, who are not even trained well in their respective disciplines, to integrate multifarious development problems and solutions? What I have found through this year's OFW exercise is sheer weaknesses of students' analytical capability. Without this capability, problems synthesis by using a problem structure chart is a waste of time and money.

In concluding, let me say this: Although the OFW has been conducted seriously and intensively, the exercise is strictly for the purpose of students' academic training. We should not dare be arrogant to think that our team proposals, which are based on half-baked information and analysis, are useful for the local government and municipalities.

INTEGRATION OF GROUP REPORTS

OFW95-PHI: PART 2

KIMURA Hirotsune

Preface

From the beginning, the GSID OFW program has had a research framework. Our focus has been regional development focusing on policy directions to respond to the widening gaps between urban and rural development, and between industry and agriculture during the development procedure. From the outset, the notion of regional development has been inclined toward rural development and agriculture. In the earlier stages, being termed the Integrated Rural Development Project (IRDP). As I will argue, rural development should not be considered only from the agricultural aspect. Rural areas should be developed in an integrated fashion, not only combining agriculture with rural industry and the service sector, but also with human development such as education and health, environmental protection and so on. Rural development is to have at its core a rural urban (rurban) center which combines the region's economy. Thus rural development should not only be rural but rather regional development.

Eventually, this kind of argument has been made and implemented in the form of the Integrated Regional Development Project (IRDP). Yet, in the Philippines, as the term "Region" has been used differently, for example Region IV, the term Integrated Area Development Project (IADP) has instead been adopted. My argument is based upon the framework of IADP in the case of Laguna Province where we conducted our month-long fieldwork.

1 General Framework of IADP

The IADP has been developed in the Philippines context for decades, a summary of which can be found in Andres A. Limcaoco, Integrated Rural Development Philippines, Sterling Publishers, New Delhi, 1989. But here, I'd

like to start from the general framework of IADP.

IADP Matrix (1) Integrated Farming — better rice production
 — horticulture (vegetables and flowers)
 — livestock and poultry

(2) Agro-industry

Rural industry in the non-agro-sector (industry and service sector)

subsidiary companies/branches and large factories

(3) development of the core rural urban (rurban) center

(4) Public Administration Support system

- economic infrastructure: transportation for marketing, credit system

- social infrastructure: education, health

- administrative infrastructure: civil service, law and order,

IADP starts with integrated farming where farming is combined with three factors: better rice production, development of horticulture (vegetables and flowers), and livestock and poultry (sometimes agriculture and others).

As an extension of integrated farming, various kinds of agro- industry, such as food-processing, also should be promoted. There is no clear boundary between agro-industry and rural non-agricultural sector development, in industry furniture, fishing nets and kitchen utensils , and in the service sector sari- sari stores, mini shops, eateries, car repair/parts, jeepney and tricycle drivers. Both agro-industry and the non-agro-sector have a variety of scale from cottage to small and medium size industry. Subsidiary companies/branches and large factories are also developed in which management comes from outside the region, from such areas as Metro-Manila. Employment in such companies is another income raising opportunity as well as a part of regional development.

These economic activities depend upon infrastructure, transportation for marketing, and the credit system. Thus, here, the role of government organizations or public administration is far reaching. Public administration is to provide a fundamental support system for "development" to take place. This

support system consists of 3 aspects.

- (1) physical infrastructure : roads, bridges, drainage, public markets, electricity, waterworks, telecommunications, irrigation,
- (2) social infrastructure : educational institutions for human resource development and health services, family planning and nutrition extension,
- (3) administrative infrastructure (the existence for promoting better government services) : town halls, law and order, garbage collection and other sanitation services, agricultural extension /veterinary service system, social service (as written in (2))etc.

These are the major components of the IAD system. During our OFW, Working Group I(WGI) examined economic activities, WGIV the service system of government organizations, WGII some government services (education and health) and WGIII studied about another component of government services (environment and infrastructure).

During the many experiences in the accumulation of IADP, two difficulties became clear. One concerns the disintegrated bureaucracy. The other is IADP's ineffectiveness in helping the rural poor.

(1)For promoting regional development as an integrated set, many government offices should be coordinated, not only the central government departments and agencies, but also the provincial and municipal governments. The central government departments are highly decentralized and vertically organized. They function vertically without coordination with other departments and sometimes even local governments where particular projects are implemented. Due to the low level of capability of local governments, they have less ability or experience to combine scattered government services in their administration. Eventually, IADP has come to have a notorious reputation , with many saying "Integration just doesn't work."

(2)For promoting IADP, infrastructure building has been given a high priority. For narrowing the gap between urban and rural development, the major government services for promoting rural areas were road construction , electricity and irrigation. In the case of the Philippines, almost 70% of the budget has been used for that purpose while providing credit and

technical/managerial extension services came second and third, respectively. Though infrastructure is important, it seems to benefit the rich. For example, if the government constructs an irrigation system, those who have more land benefit more and those who have no land to till or a very small amount of land benefit less. Agricultural production increase is important and I do not deny the importance of infrastructure. Still, credit and organization capacity are also important. Credit borrowers have been limited largely to "haves" because of the necessity of collateral. Quite often an organization's merit such as the credit and technical extensions of cooperatives has been absorbed by "haves." Though many Rural Development Projects have been practiced formally under the slogan of poverty alleviation the reality, oftentimes, has been very different.

IADP does not have a strong reputation on account of these difficulties. Yet, without pursuing integrated projects, you must live with patchwork projects. The goal should be IADP and the problem is, thus, how to improve the framework for overcoming the present difficulties.

2 IADP Approach in Laguna Province

We were able to see the same difficulties of IADP during our OFW in Laguna Province. Government credit for promoting the agricultural sector is largely utilized by the "haves" in rural areas, partially utilized by cooperatives and farmers, and largely does not reach the rural poor. The government organizations are far from well coordinated. Now, even after the introduction of Local Government Code (LGC) in 1992, which was recognized as the major drive for devolution and capability building of local governments. The number of local government officials increased to a mere 25%, up from 17% and the majority of officials remain national government employees. National government departments are highly decentralized and vertically organized. Moreover, they are severed from implementing their services in the local field. These powers are now in the hands of local government units (LGUs). Yet, LGUs, especially mayors, still have a low capability and weak integration ability to implement their services. The central government budget (IRA: Internal Revenue Allotment) attached to devolved personnel and their services is far from sufficient especially in terms of operation funds. Eventually,

devolved functions like public hospital management from the Department of Health, social forestry projects from the Department of Energy and Natural Resources and agricultural extension services from the Department of Agriculture, are being found difficult to implement.

The power of city and Municipal mayors is relatively strong to the Provincial governor for under the new LGC, Parliaments didn't want Provincial governor to be stronger than congressmen. Therefore, inter-governmental coordination among national government agencies, provincial offices and municipal governments is just no good under the decentralized central government agencies.

Low level of budget disbursement is seen in almost every country. Yet, for the Philippines, having experienced two decades of economic stagnation and the accumulation of a large foreign debt during the Marcos dictatorship, though it has reduced from more than 40% during Aquino administration (1986 ~ 1992), debt service still occupies 30% of the national budget.

A high level of illegality is another difficulty for the Philippines. There is a coexistence of various regulations and their negligence in the Philippines. The corruption level of public officials is said to be very high. Squatters can be seen almost everywhere. According to the 1990 Census, the number of people illegally migrating to uplands to cultivate land has reached 8.5 million. One third of the residents of Metro-Manila are squatters. Over 50% of Metro-Manila's waterworks is not claimed. This is not only due to leakage, but also due to illegal connections and "under reporting" by charge collectors. In the municipality of Santa Cruz, the capital town of Laguna Province, WGIV members were informed that the municipal government uses 85% of its budget for personnel services despite the regulated ceiling of 45% and the two DILG (Department of Interior and Local Government) personnel serving as monitors.

Within this context, we attempted to find a better policy orientation. The development problems of Laguna Province can be divided into three dimensions.

The first is the Western District (see the map) which is affected by the spill

over effect of Metro-Manila. Three municipalities in this district are full of subdivisions and thus needing connection roads to national highways, waterworks, garbage collection, elementary schools, etc. It is necessary for the Provincial and Municipal governments to follow up on the urbanization. In the Western District there are 5 international class industrial estates, all national projects needing housing areas for laborers and other public services to be extended by local governments.

According to the provincial planning and coordination officer, they have much difficulty in following up these services. As the major development aspects come from the spill over effect from Metro-Manila and as it is necessary that the various development aspects be coordinated or integrated, the ADP in the Western District should be coordinated and implemented not by Provincial Government but rather the National Government as a part of the Mega-Manila Development Project. Here, Mega-Manila includes not only Metro-Manila, but also the Western District of Laguna Province, Northern district of Cavite Province, the districts along the Marikina-Infanta Road (Rizal-Laguna-Quezon Provinces) as a part of the Calabarzon Development Project and the Central Luzon Development Project, including the rising industrial estates in Subic and Clarkfield (former US military bases).

The second development dimension of Laguna Province is the development problem of Laguna Lake. The highly polluted Laguna Lake is bordered by the Provinces of Laguna and Rizal and by Metro-Manila. As a result, the problem of Laguna Lake was handed to the Laguna Lake Development Authority(LLDA), which was to be the coordinating office. Unfortunately, until now it has been a very weak authority, conducting analysis while the lake is dying. Although Laguna Province sends a representative to the LLDA Committee Board, the level of consultation is low. According to the Laguna Province Planning and Coordination officer, he attends the committee meeting, eats lunch, decides the schedule for the next meeting, receives a honorarium, and returns to his office.

Now it is clear that the major factors which cause pollution of Laguna Lake can not be curbed in the near future. Soil erosion from the surrounding uplands can not be stopped considering the present infant stage of and stagnation of social forestry projects. With the continued use of many

chemicals for agriculture there is a low prospect for converting the present agricultural pattern into organic agriculture. Waste water from household will not be well treated in the near future either. As for waste water from industry, though industrial estates are requested to prepare environmental facilities even in light of the fact that local governments have poor monitoring systems, small and medium size industries which are promoted by national government for social equity are not requested to prepare them. The treatment of solid waste by municipalities is disregarded and rain flows into the lake directly through dumping sites. Thus, much time is needed to prepare proper dumping sites in the areas surrounding Laguna Lake.

In the near future, there is an unlikely prospect that the environmental degradation of Laguna Lake will be stopped. The lake is dying and it will die unavoidably. The present problem is not one of engineering but of politics. Within approximately 10 years it will be necessary to think of the development problem of an already dead lake. The answer will be, undoubtedly, the reclamation to rescue a terribly congested Manila by constructing a second Manila, or even a third Manila, but considering the increasing presence of environmentalists, it will be a difficult political decision to make. Still, this is a problem unable to be managed by the Laguna Provincial Office.

The third dimension of the development of Laguna Province is the Eastern "agricultural district" (districts 3&4). Though this district is labeled an agricultural district the term "agricultural district" connotes less importance to the development strategy of the non-agricultural sector (rural industry and service sector), a sector more important for income raising activities of the local people and for changing "rural development" into "area development." That was my impression when I interviewed the Provincial Planning and Coordination officer. Here in Laguna Province, the ADP approach is weak and not well coordinated.

Another problem I found in the Eastern District is that use is not made of the proximity of the district to Metro-Manila. Many still cling to the notion of better rice production. Though some farmers plant citrus and other crops, trading them directly in Metro-Manila, they are still small in number. Laguna is very suitable for such foods as vegetables, fruits, flowers, and dairy products. Although the possibility of vegetable cultivation seems far behind the Mountain

Province, this trend should be pursued more systematically. It is not necessary to attain "Self-sufficiency" of rice production in the province. "Self-sufficiency" should be considered at the national level, thus including the "food basket" of Mindanao.

As for the second shortcoming of IADP, the alleviation of poverty, we were happy to discover three trial efforts: the proliferation of Grameen Bank type activities, social forestry projects, the lending system to farmers by cooperatives.

Largely, the non-agricultural sector is still dominated by individual "haves" who can prepare collateral to borrow capital from the Land Bank, Rural Banks, and commercial banks to develop such businesses and ventures as rice-mills, construction operations, transportation projects, commerce, furniture making, etc. They, in addition to small and medium size enterprises, are the real beneficiaries of the government policy to prepare funds for rural development.

On the other hand, for small farmers or for the poor, "Agricultural funds are available but not accessible." This is due to the fact that: (1) they cannot prepare collateral, (2) their borrowing scale is too small for the bank loan to handle, and (3) the bank's red tape often delays the disbursement of loans which then cannot be in time for the cropping season. Eventually, farmers turn to private money lenders even though the interest is far higher.

Grameen Bank type lending activities overcame the collateral barrier by requesting borrowers to organize 5 member groups with joint responsibility for repaying borrowed funds. They also combine this activity with poverty alleviation, as only the poor (and largely women) can be members. There are 19 organizations of this type in the Philippines, with 3 in Laguna Province. As in Bangladesh, where the first Grameen Bank was constructed, these banks are very successful.

Social forestry presents another bright prospect for the alleviation of poverty. Those who migrated to the uplands are largely poor. For years, they have been regarded as illegal squatters and the destroyers of natural forests. Now, they are able to have a 25 year (plus 25 years) contract with the government to work the land (an average of 4 hectares) under the stipulation that a certain portion of the land area be planted with trees. The government is

to provide seedlings and agricultural extension services/loans for income raising. Now, they are promoters of afforestation.

A new lending scheme for cooperatives has been proposed by WGIV. Presently, the government extends agricultural loans without collateral through cooperatives which capital coming from the Land Bank. Cooperatives are regarded as having the ability to qualify borrowers because they are neighbors. The policy of the Land Bank is to lend only to the coops with a record of good management; having at least 50 members. Thus, coops with less than 50 members are unable to lend to members. Many farmers associations, the stage before becoming a coop, exist. Their members are also not eligible for government lending. Furthermore, the many farmers not belonging to either of these organizations are also not eligible for government lending. The government of the Philippines policy for the promotion of cooperatives is currently at a very low level and scattered. The Cooperative Development Authority Region IV chief stated that the integration of coops is necessary for their vitalization. So, WGIVs proposal is to extend the lending functions of good coops to non-members. In so doing, these coops will be able to absorb other coops, farmers associations, and individual farmers. Providing loans to farmers and strengthening coops can be combined under this project.

I would be very happy if any ideas for the promotion of a better Integrated Area(Regional) Development Project could come out of my above discussion.