Overseas Fieldwork Report 1996:

An Integrated Development Analysis on Yogyakarta Special District (DIY) in Indonesia A Case Study

March 1997 Graduate School of International Development Nagoya University, Nagoya, Japan

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Introduction

The fifth Overseas Fieldwork of the Graduate School of International Development (GSID), Nagoya University was successfully undertaken in Yogyakarta Special District (DIY) in Indonesia (see Map) during July 30-August 30, 1996 (hereafter "OFW'96-IND"). OFW'96-IND was conducted under the academic exchange program between the University of Gadjah Mada (UGM) and Nagoya University.

As is detailed in Tables 1 and 2, twenty four students and six advisors from GSID participated in OFW'96-IND which was designed as an integral part of GSID's formal curricular activities. Students were divided into the following five working groups (WG) based on their fields of interest:

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

WG-2: Human resources development

WG-3: Environment and infrastructure (infrastructure and environmental protection)

WG-4: Institutional development (development administration and finance, NGOs)

WG-5: Development of local culture.

The parentheses indicate subgroups of field activities. It should be noted here that WG-5 started this year.

The OFW'96-IND began with three-day intersectoral working group activities (ISWGAs) in five villages based on the well-developed Modified Rapid Rural Appraisals (MRRA) field research method. The MRRA reports, which were presented by five ISWGs at a formal discussion, are not included in this report.

The report, which contains five WG reports and Professor Kimura's synthesis, is the product of a joint endeavour between a UGM and GSID team. I would first like to express my deepest thanks to my long-standing friend, Rect or and Dr. Sukanto Reksohadiprodjo for his initiative and UGM-wide support. Dr. Yahya A. Muhaimin, Dean of Faculty of Social and Political Sciences (FISIPOL), played a crucial role as my counterpart amid his hectic work schedule in implementing this joint venture from the onset to the end with charming endurance and warm advice. We are all indebted to him.

I would also like to express my deepest appreciation for the valuable inputs and guidance provided by our counterpart advisors at UGM; Professors Siti Daulah K., Lambang Triyono, Bambang Hudayana, Haryanto and Usmar Salam. The painstaking efforts and kind assistance of UGM graduate students are also cordially acknowledged. It should also be noted that we had a great opportunity to have a series of lectures from UGM's distinguished professors, including Professors Ichlasul Amal, Loekman Soetrisno, Nasikun, Mudrajat Kuncoro, Suyanto, Ir. Ahmad Djunaidi, Jeremias T. Keban, Mohtar Mas'oed and Djoko Suryo.

I would also like to express my profound thanks to the number of collaborators and organizations, particularly the residents of various villages, cooperatives, NGOs, factories, various national, provincial and municipal government offices for their assistance and briefings which contributed to the successful completion of OFW'96-IND. My particular thanks go to DIY's host families who kindly offered their homes with warm hospitality which immensely facilitated our field research endeavours.

In OFW'96-IND, we changed our modus operandi in emphasizing more on individual students' initiative and responsibility instead of group-oriented actions. In view of the importance of OFW as an integral part of GSID's curricula, it must be continuously improved in the future in terms of cost effectiveness as well as strengthening students' capability to undertake field research.

In editing this report, I would like to acknowledge the enduring assistance of Messrs. Takeshi Higashimura and Tom Wilson.

Hiroshi Kakazu
Professor and Project Director
OFW'96-IND

List of OFW'96-IND Participants

GSID, Nagoya University, Nagoya

Table 1 GSID Faculty Members Participating OFW'96-IND

Professor	KAKAZU, Hiroshi*	Adviser to	WG1	ISWG-A
Associate Professor	HIROSATO, Yasushi	Adviser to	WG2	ISWG-B
Research Associate	HAYASHIDA, Kazunori	Adviser to	WG3	ISWG-C
Professor	KIMURA, Hirotsune	Adviser to	WG4	ISWG-D
Professor	KURASAWA, Aiko	Adviser to	WG5	ISWG-E
Research Associate	HIGASHIMURA, Takeshi	Secretary		

^{*}Project Director, OFW'96-IND

Table 2 GSID Students Participating OFW'96-IND

Name	F/M	Nationality	WG	ISWG
FURUHATA, Hiroshi	М	Japan	1	D
ISHIKAWA, Akemi	F	Japan	1	В
SUGIYAMA, Etsuko	F	Japan	1	Α
SUZUKI, Tsutomu	М	Japan	1	E
CROKER, Robert Allan	М	Australia	2	E
IDE, Etsuko	F	Japan	2	В
NOGUCHI, Junko	F	Japan	2	С
OKAMURA, Miyuki	F	Japan	2	D
YONEDA, Makiko	F	Japan	2	Α
CHEN, Ching Li	М	Taiwan	3	E
TOYODA, Takashi	М	Japan	3	D
WATANABE, Aki	F	Japan	3	Α
ARAKAWA, Hitoshi	М	Japan	4	Α
GUEYE, Moustapha Kamal	М	Senegal	4	С
KINUTA, Keiko	F	Japan	4	В
KITAMURA, Keiko	F	Japan	4	D
KITAMURA, Osamu	М	Japan	4	С
NAKASHIMA, Kenta	М	Japan	4	В
NOZAWA, Moeko	F	Japan	4	E
FUJIOKA, Yukiko	F	Japan	5	С
KOIKE, Rie	F	Japan	5	Α
LA CROIX, Julia Kirsten	F	U.S.A.	5	В
SHINTANI, Naoyuki	М	Japan	5	Α
YAMASHITA, Yuki	F	Japan	5	Е

Working Groups

- 1: Economic Development (Agricuture, Non-Agriculture)
 2: Human resources Development
 3: Environment and Infrastructure
 4: Institutional Development (Development Administration and Finance, NGOs)

5: Local Culture

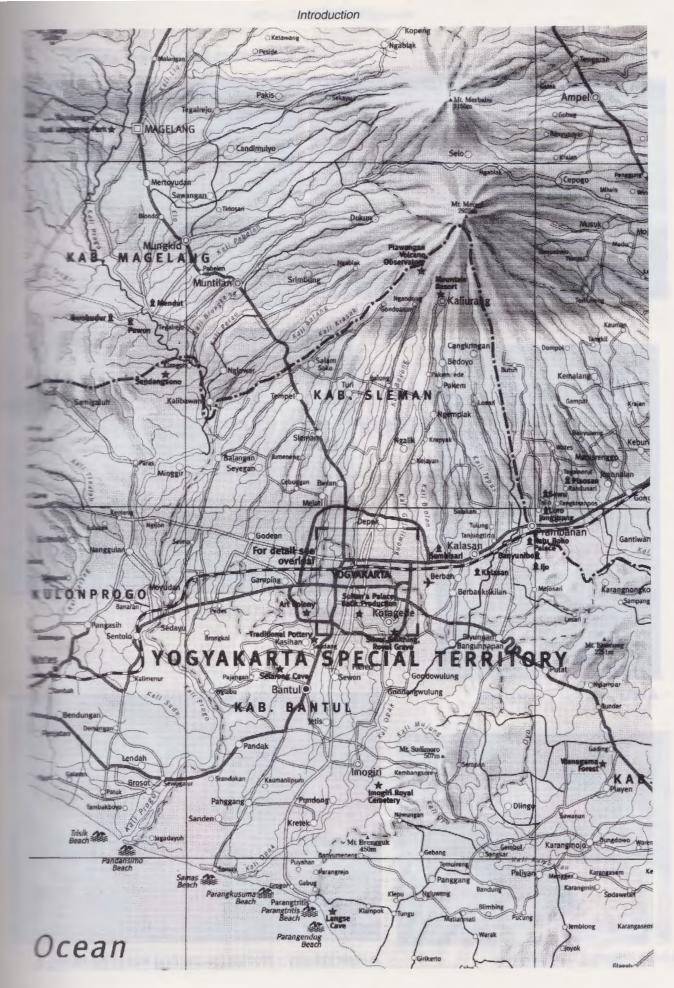
Inter-sectoral Working Groups

A: Wonolele B: Bawuran

C: Singosaren D: Pakembinangun E: Parangtritis

Schedule of All Working Groups (OFW '96-IND)

Date	Schedule
Jul. 30 Tue.	From Nagoya to Bali
31 Wed.	From Bali to Yogyakarta
	Meeting with UGM
Aug 1 Thu.	Excursion to Borobudur, etc.
2 Fri.	Visit to villages (ISWGs)
3 Sat.	Visit to villages (ISWGs)
4 Sun.	Visit to villages (ISWGs)
5 Mon.	Report preparation, Presentation on villages
6 Tue.	Day off
7 Wed.	Programs of respective WGs
8 Thu.	Programs of respective WGs
9 Fri.	Visit to Yogyakarta Special District (DIY) office, sectoral briefings
10 Sat.	From Yogyakarta to Jakarta, Day off
11 Sun.	Day off
12 Mon.	Programs of respective WGs
13 Tue.	Programs of respective WGs
14 Wed.	From Jakarta to Yogyakarta
15 Thu.	Programs of respective WGs
16 Fri.	A.M.: Special lectures on Regional Development P.M.: Lectures by sectors
17 Sat.	Day off
18 Sun.	Day off
19 Mon.	Programs of respective WGs
20 Tue.	Programs of respective WGs
21 Wed.	Programs of respective WGs
22 Thu.	Programs of respective WGs
23 Fri.	Day off
24 Sat.	Report Writing
25 Sun.	Report Writing
26 Mon.	Report Writing
27 Tue.	Presentation, Farewell Party
28 Wed.	From Yogyakarta to Bali, Day off
29 Thu.	Day off
30 Fri.	From Bali to Nagoya



▼Farmers in rice field



▼Sarak Pondohs: In front of a warehouse





▲Batik industry: Painting wax



▲Batik industry: Stamping wax



▲Rice field with irrigation



▲Batik industry: Women are painting wax in the factory B

Working Group 1

Economic Development

Working Group 1

Economic Development

1. Overview

1-1 Introduction

The following field research was undertaken in Yogyakarta Special District (Daera Istimewa Yogyakarta; DIY), Java, Indonesia from July 30 to August 30, 1996. Working Group 1, mainly concentrated on economic aspects of the DIY region. Among Working Group 1, sub group A focused on the agricultural sector of DIY while sub group B focused on the industrial sector.

1-2 General Information of DIY

The DIY region comprises an area of 3,186 km, containing a population of 3,154,265 persons, with a population density of 990 persons / km². Population growth over the last five years has been relatively low (0.86% annually). It seems reasonable to suppose that the population density of DIY is very high since that of the whole of Indonesia is 100 persons / km²(Table1-1). The population distribution is highly uneven; 60% of Indonesians live in Java island although Java comprises only 7% of the total Indonesia land area.

From the aspect of GRDP(Gross Regional Domestic Product), this figure stands at Rp.2,925.224 billion at constant prices. DIY contributes to only 2.1% of total GDP even though the growth rate of GRDP of DIY was high at 8.1% (Table1-2). Per capita income is relatively low, and ranked 18th among 27 prefectures¹ Of the total work force, 1,512,323 persons, or 44.4% of the total are engaged in agriculture, and the agricultural sector contributes 17.25% of GRDP of DIY². Both shares are larger than the other sectors. Thus it can be concluded that agriculture is still the leading sector in DIY. On the other hand, 12.5% of the workforce is engaged in the industrial sector, contributing 15% of GRDP of DIY, but the growth rate of this sector is the highest at 17.7% from 1993 to 1994. The change of the share of GRDP from 1985 to 1994 shows the change of the economic structure of DIY; agriculture's share fell from 26.2% to 17.5% while industry' share increased from 8.1% to 14.5% (Fig.1-1 and 1-2).

^{1.} Source; Indonesia 1996 an official handbook, Department of Information, Produk Domestic Regional Bruto1993-1994, BPS

^{2.} Source; BPS statistic Indonesia 1994, Kantor Statistik Propinsi DIY

Table 1-1: Area and population

	National	DIY
Total area(km²)	1,919,319	3,186
Population (1994) [person]	192,216,500 *	3,154,265
Population density (person/km²)	100 *	990

*= estimate number

source: Statistics Indonesia 1994, BPS

Department of information Indonesia 1996

Laporan Tahunan 1994, Dinas pertanian tanaman pangan DIY

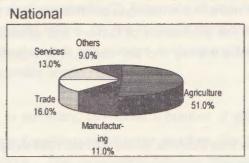
Table 1-2: GDP and GRDP (Year 1993)

	Real GDP/GRDP*	GDP/GRDP per capita
	(Rp. billion)	(Rp)
National	139,707.1	1,596,832
DIY	2,925.2	1,390,641
DIY ratio (%)	2.1%	87.1%

*Base year = 1983

source : Statistics Indonesia 1994, BPS
Kantor Statistik Propinsi DIY

Figure 1-1: Share of employment by industrial origin (1993)

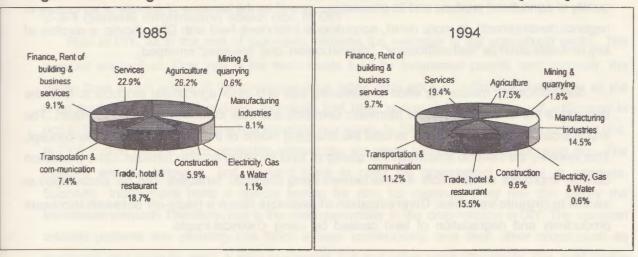




note: Others = mining, electricity & gas, construction, transportation & communication, finance

source : Statistics Indonesia 1994, BPS
Kantor Statistik Propinsi DIY

Figure 1-2: Change of the economic structure of DIY from 1985 to 1994 [GRDP]



source: Produk Domestic Regional Bruto, Daerah Istimewa Yogyakarta, Tabel-tabel Pokok 1985-1992, BPS

Produk Domestic Regional Bruto, Daerah Istimewa Yogyakarta, Tabel-tabel Pokok 1993-1994, BPS

2. Agricultural Sector

2-1 Agriculture in DIY

Total farm land in DIY is 168,252 ha. Land is segmented, and by the definition of DIY office of the agricultural department, farm land is designated as either paddy field/ Sawah or dry Land/ Tegal. Since arable land has been decreasing by 0.4% every year through urbanization and industrialization, the DIY office has been trying to increase the productivity of land. The estimated total number of farmers is 673,326 among a 1,512,323 total workforce in 1993. The rate of farmers is 44 .4%. From the aspect of scale, there are 304,630 farmers who have less than 0.5 ha land and 127,957 farmers who have more than 0.5 ha land. Others do not have their own land, and thus work for landowners as tenants or farm laborers. From these figures it can be stated that the business scale of farmers in DIY is very small. Small-scale farmers occupy 70.4% of total farmers and the average business scale is 0.25 ha. It is thus very hard for most farmers to rely solely on agriculture for a living. In order to supplement farming incomes most farmers or their families have side-businesses such as poultry, handicraft of bamboo, or commuting to the city for construction work. The Agricultural sector of DIY is faced with numerous challenges but this research paper perceives the most serious ones to be that of the low productivity of farmers and difficulties in mechanization. Since the agricultural sector is still a leading and key sector, it is important to investigate its role in the economy of the DIY region.

2-2 Agricultural Policies in DIY

Firstly, it is important for small farmers to increase their incomes. In line with the 1993 Guidelines of State Policy (GBHN), the targets of agricultural development are the increase of farmers income and their standard of living, the diversification of agricultural production, agricultural intensification and extensification supported by agro-industries, the increase of manpower productivity and employment opportunities in the agricultural sector, the availability of various foodstuffs, better quality of agricultural produce and its processing, as well as the increase of the role of agriculture in regional development³. In more detail, according to interviews held with DIY officials, a number of key concepts such as "self-sufficiency", "diversification, and "linkages" emerged.

Self-sufficiency means the effort of producing rice and other agricultural products to fulfill the demand of the Indonesian people (domestic demand) and thus to reduce the need to import. The importance of maintaining supply to fulfill the changing needs of the people is key to this concept. This involves the need to sustainain the quality of land by using organic fertilizer. Land protection can be improved considerably if those farmers using chemical fertilizers can be encouraged to switch to organic varieties. Diversification of products faces a trade-off between increasin productivity and degradation of land caused by using chemical inputs.

^{3.} An official book, INDNESIA 1996, Department of Information Directorrate of Foreign Information Services, p.12

The second is the diversification of products for better nutrition. Local products should be characterized by their regional identity. While rice is recognized as the staple food, at the sametime, the regional variety in fruit and vegetables gives food from a particular area special characteristics.

The third is the linkage between the agricultural and industrial sectors. As the competition in domestic and international markets has become more severe for small farmers, higher value-added products are increasingly in demand. Whether the plan for diversification succeeds or not, depends on local efforts in agribusiness. Strategies exist for strengthening the agricultural sector which are characterized by improving capability and capacity of farmers in order to develop other sectors related to agriculture through forward-linkages in an economic system, not only in DIY but the whole of Indonesia.

On the other hand, agriculture in DIY exhibits a number of problem areas, such as the conversion of land use for construction purposes. With this problem in mind, DIY officials have prepared four countermeasures: (1) To exploit new farming areas by converting dry land to wet land. Related to this, irrigation around Kulon Progo regency is still poor so establishing an irrigation system can be deemed necessary. (2) Expansion of new farm areas, substituting for housing of newcomers and company offices. (3) The Regional office has a training institution for farmers to learn how to plant, cultivate seeds and manage land and machinery. (4) DIY has an institution which cultivates fruit and vegetable seeds.

In summary, DIY faces a number of difficult issues concerning modernization and the move toward building an industrial structure. For this reason, agriculture must harmonize with the other sectors. The cooperation between officials and farmers, and between the younger and older generations, is necessary for sustainable agricultural development.

2-3 Rice in DIY

2-3-1 General information about rice in DIY

Rice in DIY, as in the rest of Indonesia, remains the mainstay of the agricultural sector. The reasons are twofold. First, rice is the main staple food for Indonesian people, and secondly, the prices have a high weight in the consumer price index. Rice price is commonly considered as the price leader for other commodities. Indonesia had been successful in attaining self-sufficiency in rice in 1984, but since 1990, she has imported rice again. In 1996, she will not expect to import rice. In DIY, rice is not the most profitable commodity, yet many farmers still keep growing rice. The reasons are the following; first, farmers have to obey the government policies or interests. Secondly, Indonesians have a special feeling for rice, for instance, Only rice can satisfy the Indonesian stomach. Therefore, rice is the main commodity in the crop-rotation in DIY. The common rotation patterns are; planting rice twice a year continuously, and then other crops such as soybeans and peanuts once a year or planting rice and other crops alternately. The total paddy

field in DIY is 61,151 ha and scale of the planted area is 134,479 ha in which rice is planted two or three times a year. The share of paddy field in the total farm area is 36 per cent. Total production is 733,332t and the yield is 5.387t /ha². Most farmers in DIY grow mainly high yield varieties (HYV) for example, IR 36 and IR 64. The rate of mechanization still remains very low because tractors remain expensive. In Bauran village in DIY, for example, there are only 4 tractors in the whole village. The owner is a rich land owner and he rents his tractors to the farmers in his village. The farmers learn how to operate tractors by using them. There are some milling factories with Dolog, some KUDs some NGOs and a few individually owned. The farmers can use those factories for milling paddy rice. Agricultural infrastructure, such as the irrigation system, is wide spread in DIY if both simple and traditional systems are included. The level of coverage of the irrigation system is 83%. Rain fed is 15% and others are 2%. In many cases the government built a dam or another water source the completion of which farmers or villagers are responsible for repair and maintenance. When the irrigation systems were observed in various villages, a great variety emerged. Some villages have very good and modern irrigation systems but others appear inadequate. In spite of this, one conclude that irrigation is widespread in DIY.

2-3-2 Rice Distribution System

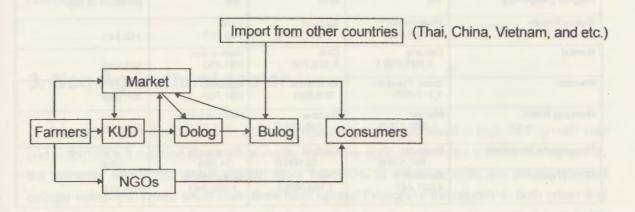
There are chiefly three paths of rice distribution. The first path is farmers to KUDs, KUDs to Dolog, Dolog to Bulog, and finally Bulog sells rice to markets. The second one is farmers directly to markets. Sometimes KUDs or even Dolog purchase rice from markets. After that, it follows the same path as the first. The third one is farmers to some NGOs which deal with rice. The NGOs sell rice to markets or directly to consumers. From our interviews with farmers, it appears that many of them do not want to sell rice to KUDs because of some problems with the KUDs themselves. The amount of rice sold immediately to KUDs or government agencies is not so large. In addition, Indonesia has not allowed rice to be exported.

The following section outlines the operations of the three rice distribution agencies. First, KUD Koperasi Unit Desa is Village Unit Cooperative. This is a private cooperative but gets much support from government because when rice is in short supply, KUDs interest would be very close to that of government policies. Therefore, KUDs often appear to be a government agency. Each district has one KUD, and there are 62 KUDs in DIY. Secondly, Bulog / Budan Urnan Logistik is The National Logistics Agency or The Government Food Logistics Board with the main responsibility of assuring food availability and stabilizing the price of food, especially rice. The ultimate goal of Bulog is to provide sufficient food for the people at an affordable price. Thirdly, Dolog / Depot logistik is a subordinate agency of Bulog. Dolog functions as Bulog at the provincial level. Bulog is presently supported by 27 Dologs, one in each province. Bulog manages more than 1500 units of private and government owned warehouses, and each Dolog has one unit of warehouses in the province.

^{4.} Source; LAPORAN TAHUNAN 1994. DINAS PERTANIAN IANAN PANGAN PROPINSI DIY

In order to implement its role in stabilizing prices of staple food particularly rice, Bulog operates a buffer-stock scheme which entails the buying of rice during the harvest season and releasing stocka during a lean month, or whenever necessary. Bulog maintains an adequate amount of rice as stock that can be released atany time.

Figure 2-1: Flow Chart - Distribution of rice in Indonesia



2-3-3 Problems and constraints of growing rice in DIY

As mentioned before, there are various problems with growing rice in DIY, such as "degradation of farmland, and difficulty of mechanization, or difficulty of buying new harvesting tools. There is also an aging problem as in Japan. Water shortage with an insufficient irrigation system is another serious problem. The main problem in rice cultivation in DIY would appear to be the existence of non-active KUDs. According to the interviews with the farmers, there are some non-active KUDs in DIY which face a number of serious problems.

2-3-4 Countermeasures

The most urgent problem to solve is the problem of non-active KUDs. In order to solve this problem the administration and activities of KUDs needs to be improved. For that purpose, government should send new directors or proceed with the integration of two or three KUDs into one KUD. Government should facilitate growing not only HYV but also local varieties, and for farmers to try to reduce the amount of fertilizers and pesticides, with government support, to avoid further degradation of farmland. Government should spend more on agricultural infrastructure such as irrigation systems to improve the productivity of land and proceed with mechanization for increased efficiency.

2-4 Fruits and vegetables in DIY

2-4-1 General Information

An official of the Ministry of Agriculture emphasized that it is necessary to develop agribusiness and agro-industry to increase the value-added of agriculture, farmers income and employment opportunities. In terms of income, onion and chili are thought to be more profitable than rice.

Related to this, Salak Pondoh which is called 'snake skin fruits' in English is also profitable and important as a cash crop. The level of production of major fruits and vegetables is displayed in Table1. As mentioned above, Salak Pondoh in Sleman regency is a very significant local product (Table 2-1)

Table 2-1: The rank of share of production in 1994 (unit: ton)

Region (Regency)	1st	2nd	3rd	position of rice
Kuron Progo	Watermelon 1,579,473	Banana 864,367.3	Chili 546,705	112,141
Bantul	Banana 1,993,206.1	Chili 1,328,700	Red-onion 831,250	165,935
Sleman	Salak Pondoh 1,312,090	Jack-fruits 928,680	Banana 581,700	301,986
Gunung Kidul	Mango 986,815.6	Banana 555,176.8	Rose-apple 273,225.7	149,614
Yogyakarta Municipal	Papaya 107,539.6	Banana 32,996.8	Rose-apple 31,085	3,656
DIY (Total)	Banana 4,027,447	Chili 2,154,965.3	Watermelon 1,696,740	733,322

source: LAPORAN TAHUNAN 1994

2-4-2 Case Study - Salak Pondoh

There are many kinds of fruits and vegetables in DIY. In particular, Salak Pondoh which characterises Sleman regency, is an important cash crop in terms of providing an additional means of income improvement. In 1974, cultivation started at Mbangurkerta Village in Turi District. This then spread to Pakem District and Tempel District in 1978. Taking for example an owner of Salas Pondoh field, Mr. W has only two employees. They can cultivate a relatively large area of land (9,000 m²). The land has 2,750 trees. While it takes four years to mature, Salak does not require a great deal of attention. In addition the crop is more profitable than rice, soybeans and peanuts in 1995, the total production of Mr.W is 70,100 tons, compared with 1,312,090 tons in Sleman regency. Harvest time is mainly during the rainy season, from November to January. Mr.W is a member of only one cooperative which started in 1995 but is not active. The improvement of cultivation skills is supported by staff of the School of Agriculture in Gadjha Mada University Farmers learn how to get rid of disease and manage modern fertilizers. They often use organic fertilizers. Pesticides are not used because of severe damage to trees. An irrigation system was founded by the group of landowners therefore water shortage is not a problem for the time being However, the relationship with government staff is not well organized, although land can be leases from the DIY office for experiments. Salak is thus an important cash crop in this locality.

2-5 Conclusion

In DIY, as noted above, the share of agriculture contributing to GRDP has decreased and its growth rate is relatively low. However, the agricultural sector has still a very significant role to play in absorbing surplus labor and creating income for people in areas of high population density.

The sector is also extremely important in terms of providing a cheap food supply. Agricultural development in DIY is aiming for diversification for a variety of reasons. In order to fulfill this goal it is important that ways are considered that achieve this in a sustainable manner. From this view point, the agricultural sector should improve the productivity without further land degradation. Agricultural development should also reflect regional economic and geographical characteristics. If this form of agricultural development is achieved the agricultural sector can contribute to the whole regional economy.

3. Non Agricultural sector

Since the 1980s the Indonesian economy has continuously achieved a high GDP growth rate and in the 1990s it reached about 7% annually. While the agricultural sector is still a leading sector, the industrial sector has grown rapidly. More than 90% of establishments are small-scale and cottage industries. These small-scale firms have spread throughout the country in both urban and rural areas. Most of them engage in labor-intensive industry, and play an important part in job creation and absorbing surplus labor.

3-1 The present situation of industry in DIY

3-1-1 Definition of small-scale industries

There is no standard definition of Small-Scale Industries (hereafter SSIs). Different institutions or government departments have adopted different definitions according to their respective purpose (Table 3-1). This situation means there is no adequate policy to promote SSIs.

Table3-1: The definition of small-scale business

	Category							
Institutions / low	Financial	Number of workers	Others					
Small Business Law	Net capital, excluding land and building < Rp 200 million		Sales < Rp 1 billion per year. The owners should be Indonesian citizens. The firms be independent of other company.					
Central Bureau of Statistic		SSIs 5-19 workers Household industry < 5 workers						
Ministry of Industry	1990: Total assets, excluding land and building in which the owners stays < Rp 600 million		The owner should be Indonesian citizen					

source

Undang-Undang Republik Indonesia Nomor 9 Tahun 1995 Tentang Usaha Kechil, Department Koperasi dan pembinaan Pengusaha Kecil, Direktorat Jenderal Pembinaan Pengusaha Kecil 1996/1997.

Mari Panfestu (ed.), 1996, Small-Scale Business Development and Competition Policy, Center for Strategic and International Studies.

3-1-2 The role of small-scale industries

SSIs are important for Indonesian economic development because of their characteristics such as adoption of relatively labor-intensive techniques and wide dispersion in both urban and rural areas, which may lead to increased employment creation, regional economic development and improvement of income distribution. Moreover, SSIs may help to nurture entrepreneurship through their own productive and marketing activities, which can make it possible for business expansion not only in scale but also in diversity. This may lead to regional economic development through forward and backward linkages.

3-1-3 Present situation of small-scale industries

As mentioned above, in DIY there are many small-scale industries in terms of number of establishments and labor force, even if SSIs produce only about 50% of total value-added and their productivity is about one-fifth to one-sixth of large/medium companies (Table 3-2). This data indicates the labor-intensive characteristics of SSIs and an ability to absorb more surplus labor than large/medium industries.

Table3-2:

	total		medium/larg	medium/large industry		small scale industry		
	1994	1995	1994	1995	1994	1995	1995	
establishment	76,600	77,968	111	123	76,489	77,845	99.8	
employment	229,411	240,256	22,937	25,948	206,474	214,308	89.2	
investment (Rp. billion)	771.47	706.36	228.37	356.43	343.11	349.93	49.5	
production (Rp. billion)	1,146	1,272.65	453.92	513.32	681.65	759.38	59.7	
value-added (Rp. billion)	457.04	508.85	181.80	185.32	275.25	323.54	63.6	
productivity (Rp. billion)*	2.0	2.1	7.9	7.1	1.3	1.5	171/10	
export (thousand US\$)	75,688.7	90,940.5	58,457.9	70,013.8	17,230.8	20,927.1	23.0	

*productivity per capita = value-added / employment

source: Dinas Perindustrian Propinci D.I.Y. Tahun 1996

Table 3-3: SSIs by kinds of product (1994)

	establish	ment	employ	ment	Product	tion	Value-a	dded	Productivity
kinds of industry		*		*	(Rp. billion)	*	(Rp million)	*	(Rp. 000)
Foods	29,328	38.3%	78,149	37.8%	253.235	37.2%	65,299	23.7%	835.6
Textile, leather	5,068	6.6%	20,897	10.1%	145.496	21.3%	75,482	27.4%	3,612.1
Chemical & building material	15,243	19.9%	50,132	24.2%	145.228	21.3%	64,015	23.2%	1,276.9
Handicraft and general	24,300	31.7%	47,695	23.1%	116.809	17.1%	52,935	19.2%	1,109.9
Metal	2,550	3.3%	9,601	4.6%	20.878	3.1%	17,515	6.3%	1,824.3
Total	76,489	100%	206,474	100%	681.646	100%	275,246	100%	1,333.1

*= Composition

source: Laporan Tahunan 1994, Kantor Wilayah Department/Dinas Perindustrian Propinsi Daersh Istimewa Yogyakarta, 1995

Table 3-3 above indicates another aspect of SSIs situation. Although the number of establishments related to the food industry is the largest (38.3%), the value-added is not, 23.7%. Productivity (value-added divided by employment) of the food industry is the lowest in all kinds of industries. This low productivity may result from their small size and unskilled management. For the majority of local people, it would appear to be easier to enter small-scale agribusiness through using locally grown and harvested raw materials.

As for marketing, 23% of total exports by manufacturing industry was from SSIs (Table 3-2). In fact, however, only limited enterprises are dealing with export goods and the majority of the SSIs sell their products to the domestic market only. The major marketing channels of SSIs are to merchandise their products to distributors, or to retail directly to consumers. Therefore only a few SSIs are developed enough to participate in the world market at present. Major export products, including both large/medium and SSIs, are mushroom crisps, textile and garments, leather goods and wood craft.

3-1-4 Policy for development and increased effectiveness

From a macro-economic viewpoint, the government of Indonesia has tried to introduce a marketoriented economy, under which less competitive SSIs should struggle hard for survival and expansion. Thus the government has purported to support SSIs. In fact, government policy on the development of SSIs, while not recent in conception, has not seemed to be adequate in promoting the development of SSIs.

The Indonesian government has implemented a credit program since 1974, through two programs which provide funds for plant and equipment (KIK) and working capital (KMKP). These two programs were integrated into one program (KUK) in 1990. In this program, all banks, state-owned banks and private banks should also provide 20% of their total credits to SSIs. The definition of SSIs used to qualify for this financial support is all enterprises whose total assets, excluding land and building, are below Rp. 600 million. This is very high and doesnt reflect the reality of the situation of SSIs. Therefore only medium scale firms gain access to this special credit program. In addition, large banks tend not to have the know-how, capability and experience to lend to SSIs. The quantitative target of this credit appears to have been achieved in recent years. However, among SSIs, few credits are provided for smaller scale firms. According to our research, only larger firms can use these government credits. The main problem for SSIs is access to credits rather than the level of interest rate.

To improve links between small and large enterprises, the foster-parents program (bapak-angkat) was established by the Ministry of Industry in 1979. The aim is to promote the progress of SSIs along with the development of larger companies. The types of linkages are various such as trade linkages (large firms assist as a wholesaler/marketing agent), simple buyer-supplier relationships, subcontracting linkages and linkages though developmental assistance (large firms help unrelated small firms in the product market as well as the financial market and providing relevant information).

The number of large and small firms under the foster-parent program in DIY is presented in Table 3-4. Although the total number has increased, small firms account for only 1.3%, which means that only few firms can get profit from the program. In addition, large state-owned and private companies are obligated to have child companies, and sometimes they fail to choose proper small companies.

Through policies to develop cooperatives, many KOPINKRA have been established. This type of cooperative has been organized to promote workers skill and welfare depending on the local community to which small firms belong. In 1994, there were 93 KOPINKRA in DIY. However the number of cooperatives that belong to any organization is relatively small. This figure indicates that this policy has not been successful up to present.

The provincial government of DIY also provides some other assistance to SSIs. They offer training programs that provide skills, techniques, entrepreneurship classes, and a counseling service with new entrants in opening a business. They also encourage groups of SSIs to use new equipment by lending them free of charge. For this purpose, the provincial government owns machines for production of tempe, tahu, nata de coco, tile and so on. Furthermore, because DIY is a sister city of Kyoto, an exchange programs with Kyoto prefecture exists that includes the despatch of some trainees to Kyoto to learn techniques such as bamboo processing.

Table3-4: Number of Foster Parents

Year	Foster parents	SSIs having FP
1993	59	633
1994	64	812
1995	68	1,002

source : Dinas Preindustrian Provinci Daersh Issimewa Yogyakarta, Laport Tahunan '95

3-2 Case study - Batik industry

Batik is one of Indonesia's traditional handicrafts and originally was produced solely for clothing. Though this handicraft is now one of the most popular souvenirs for tourists who visit Indonesia, the Batik industry seems to have shrunk in terms of the number of establishments. Replacing the decrease in number of handicraft Batik makers, Batik printing is increasingly dominant in the market. Thus, this traditional industry is now confronted with strong competition from mechanized mass production and has to become internationally competitive concerning good quality, time of delivery and ability to fill a big order.

To become more competitive, this industry has made great efforts; (1) to innovate the production procedure like the method of stamping wax, (2) to introduce new raw materials, for instance, silk, wool and synthetic dyes, and (3) to develop new products and new colors including table cloths, napkins, cushions and praying mats for Muslims.

During the OFW program our group visited two different types of handmade Batik factories (names of factories, say, A and B), both of which started business around the Sultan Palace in Yogyakarta city three or four generation ago. They also have retail outlets next to the factories. Firm A has 30 factory employees, whereas B has about 100 factory workers and 35 shop employees. In both firms tasks requiring dexterity are performed by women, whereas men engage in tasks needing strength, for instance, stamping wax and washing off the wax. Hence, the majority (about 75%) of employees in the factories are female. Regarding supply of raw materials, because of the suspension of payment on raw materials, firm A utilizes the Batik cooperative which owns a cotton factory, while, due to the low price, firm B buys raw materials directly from cotton factories.

Their marketing strategies are quite different and it is apparent which strategy is more effective. Firm A does not take advantage of location in a tourist city to increase customers as the owner does not want to pay high commission to tour leaders, for which the price of his products must be raised. Therefore firm A sells the products to big retailers in Solo, Surabaya and Jakarta and a few tourists who visit the shop to purchase Batik products.

On the other hand, firm B makes a great effort to welcome foreign tourists. They serve drinks to the customers and most salesclerks can speak a foreign language (Japanese and English). They demonstrate the production process of Batik to the customers as a kind of service. Firm B has retail branches in Yogyakarta and Dempasar in Bali and has to stock from other factories about 60% of the items they deal with. This attitude toward commercialism may be one of the reasons why firm B has been able to expand its business more than firm A.

3-3 Problems, constraints and suggestions

With respect to the problems and constraints surrounding the actual situation of SSIs, three main problems seem to be central in impeding further development. The first is an unskilled labor-force including owners, managers and workers. For instance, there seem to be many owners and managers who do not have knowledge of accounting, and are thus managing their business without knowing the production cost and the profit per product exactly. This problem causes difficulties in lack of innovation, inability to improve productivity and as an obstacle to market expansion. The second is a problem of capital. For many SSIs it is quite difficult to get loans from banks and to receive governmental support and subsidized credits. Therefore they do not seem able to invest in new equipment nor purchase sufficient raw materials for production. The third is low entrepreneurship. From the interviews, we found entrepreneurship to be one of the most important factors in developing a business. These three points prevent most SSIs from attaining competitiveness in both the domestic and international markets. The problems are inter-linked to create a vicious circle which SSIs must break in order to improve their performance.

To overcome these problems, several suggestions can be recommended. The first is to provide adequate governmental support. For example, setting a target for SSIs which do not have any other means to get loans, and offering easier access to bank credit services. This can be conducted not

by increasing the amount of the subsidy, but by altering regulations to make them more appropriate to the present situation, or through the provision of more information concerning credit services. The second is to provide an opportunity for marketing. The provincial government holds both expositions and fairs to support the activities of SSIs. Through these events, SSIs should aim to take advantage of the opportunities as much as they can. The third is to share knowledge of technology, new products and marketing information among small-scale firms, big companies, the provincial government and the R & D institutions. The last point is to provide various schemes for vocational training. In the case of DIY, the provincial government has tried to offer this kind of educational service, but effectiveness has not been sufficient to promote industrial development. Therefore, the expansion of vocational training, both quantitatively and qualitatively, is recommended.

In addition, a way of developing SSIs is to obtain more benefit from the location of DIY as one of the most famous tourist spots in Indonesia. There are many SSIs which engage in traditional handicraft production in DIY for sale as souvenirs to tourists. While mass produced manufactured goods are becoming increasingly dominant, through maintaining the quality of traditional handinade products higher value-added can be created and SSIs may be able to be compete. Therefore, for the progress of SSIs, it is recommended that high quality in the production of traditional handicraft goods is maintained, taking advantage of DIY as a tourist spot.

4. Conclusion

We have discussed the agricultural and industrial sectors respectively and a summary of each sector is presented in Table 4-1. To conclude this report, the present economic situation and problems at the macro rather than sectoral level are presented.

Generally-speaking, as an economy develops, the leading sector changes from agriculture to industry and then from industry to services. The first step toward the change is to raise the productivity of agriculture, leading to a transfer of work force to the industrial and service sectors. Judging from the rapid shift of the economic structure from agriculture to industry in DIY (Figure 1-2), the transition of the economic structure has begun. Thus for the economic development of DIY, it is of crucial importance to improve agricultural productivity and to encourage industry to grow more rapidly than at present. However, if efforts concentrate only on urban areas (a common occurance in many developing countries) it may exert various harmful influences related to excessive urbanization and overpopulation. Thus the development of rural districts is also important.

The following strategies can help with rural development. The first strategy is to improve agricultural productivity. With progress in agricultural production, productivity rises and surplus rural labor appears. As a result, a new work force is supplied for the sectors other than the agriculture.

Actually, in DIY, many farmers in rural areas already have a side job and come to work from villages to the Yogyakarta city. This phenomenon, however, is partly because of the low productivity of agriculture, and the shortage of demand for long-term labor. The second strategy is to promote SSIs and cottage industries. In order to absorb surplus labor and to provide steady and continuous employment it is necessary that other sectors develop. But, by result of an unfavorable location compared with other locations in Indonesia, it is unlikely that large companies will take a leading part in the regional development and modernization of industry in DIY. In addition, considering the excessive urbanization as mentioned above, the development of SSIs and cottage industries can help DIY to develop in a regionally balanced way. The third strategy is to take advantage of the location of DIY as a tourist spot. Many tourists visit Yogyakarta city, stay in hotels, eat at restaurants and buy many souvenirs. They use a large amount of money, consume food and generally stimulate the economy. The more tourists come, the more money flows into the region. In this sense, efforts to attract tourists through advertising and through the provision of easier access for tourists to the city will be beneficial. Finally, a strategy to provide necessary infrastructures and social capital in rural areas is required. Basic facilities such as roads, electricity, telephone and water supply are often necessary to encourage the establishment of factories in rural areas. In particular, roads and public transportation are in need.

To summarize the points mentioned above, the balanced growth of all sectors such as agriculture, industry and services can enable an expansion of the labor market and simultaneously supply enough food without relying too heavily on imports. This can result in regional development, which can be helpful in equalizing income distribution between both rich and poor, and between rural and urban areas.

Table 4-1: Summary

	Agricultural sector	Non agricultural sector
Major Characteristics	The leading sector The decrease of the rice field and farm land(because of industrialization and urbanization) = -0.40%/year No full-time farmers(most of them have side-businesses) Rice is still very important but other crops are becoming more profitable	High GRDP growth rate of the sector = 17.7% (DIY 1993 - 1994) Rate of manufacturing industry sector in GRDP = 15 % (1994) High share of Small Scale Industries establishment = 99.8%
Scale	Very small business-scale per household >0.5 ha; 127,957 households(farmers) ≤0.5 ha; 304,630 households(farmers) = 70.42% Total households; 432,587(1993) Total farmland(rice field + dry land);168,252ha(1994)	 employment = 89.2 % production = 59.7% Important role of SSIs - creation of employment, preservation of culture. Unpaid family workers = 30%
Production	Amount of Rice = 733,332 t (1994) Productivity of Rice = 5.45 t/ha (local varieties +HYV) Main other products; bananas, chili, red onions, salak pondoh, watermelons	Share of production by kinds of product - Foods = 37.2% - Textile, Leather = 21.3% - Chemical & Building materials = 21.3% - Handicraft and General = 17.1% - Metal = 3.1%
Employment	Total farmers: 673,326(1993) = 44.4% among total workforce, 1,512,323	Share of employment by kinds of product - Foods = 37.8% - Textile, Leather = 10.1% - Chemical & Building materials = 24.2% - Handicraft and General = 23.1% - Metal = 4.6% Wage of handicraft industry = 3000~6000 Rp./day
Policies	Self-sufficiency of rice Diversification (of products adopted to people's needs for good balanced nutrition) Promotion of the productivity and efficiency Improvement of income of the farmers Utility of agribusiness - creation of job opportunities	Government's promotion programs - Credit Programs KIK / KMMP (1974 - 1990) → KUK (1990-) - Foster-Parents Program (Bapak-Angkat) - Cooperatives (KOPINKRA)
Effectiveness of Policies	Self-sufficiency of rice→almost achieved Continuing efforts for variety kinds of products Research of better seeds for more production	 Inadequate financial support = difficulties to get loans from banks Weak inter-linkages of Foster-Parents system Lack of penetration of government policies
Problems and Constraints	 Low productivity of farmers [Difficulty of mechanization(high cost of machines), Degradation of farmland, Disease of agricultural products(kukun, mold, and etc.)] Non-active KUDs(official's corruption and etc.) Aging problem(shortage of young labor force at the present) 	Unskilled labor force Difficulties to get loans from banks Lack of entrepreneurship
Recommendations	<sustainable agricultural="" development=""> Mechanization → efficiency up Development of agro-industry Diversification of products Legalization of local varieties Enlargement of new arable land Improvement of KUD administration and activities Promotion of value-added of agricultural sector </sustainable>	 Adequate financial supports Assistance for marketing Provision of various schemes of vocational traning

Source : Working Group 1

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Working Group 2

Human Resources Development

Working Group 2

Human Resources Development

1. Introduction

Human resources development (HRD) is both a pre-condition of, and a factor sustaining and underlying, economic development. The education sector creates human resources that complement physical resources, equipping the population with necessary skills and training. The health sector creates and sustains the health and community conditions necessary for development.

While both sectors are important, this report focuses on current issues in the Indonesian education sector.

1-1 Overview

In the short fifty years since Indonesian independence in 1945, the educational attainment of the Indonesian people has improved remarkably. Illiteracy has fallen to 16%, and the average length of schooling has risen to over 10 years. Primary schooling is virtually universal, junior secondary schooling was made compulsory in 1994 and is anticipated to be universal by 2005, and senior secondary schooling and higher education are being sustainably and systematically expanded. Primary and secondary school enrollment alone increased from 3 million in 1970 to 38 million in 1990. However, rapid quantitative expansion has caused problems of school quality, and it is balancing these two that is the main issue presently facing the Indonesian education system.

Indonesia has a relatively high but rapidly falling population growth rate (1.6%), so her large population is expected to reach 210 million by the year 2000. Still almost 40% of the population will be less than 18 years old. Indonesia is geographically dispersed, and has a multiplicity of distinctly different cultural groups, speaking over 400 languages and dialects. A national language - Bahasa Indonesia - has been chosen, and is spoken by virtually everyone, but learnt by most as a second language in school. Indonesia's education challenge has been daunting.

Indonesia's economic development is guided by the 25-year Development Plan - PJP II (1994/5 to 2018/19) - and the 6th 5-year Medium Term Development Plan - REPLITA VI (1994/95 to 1998/99). Both heavily emphasize human resource development (HRD) as the most decisive factor of development, particularly important as the PJP II period is identified as the 'take-off' period of industrialization. Indonesia's present per capita GDP is approximately US \$ 940.

1-2 Education System

Based on the National Education Law No. 2 of 1989, the national education system is defined in terms of units (school education and out-of-school education), paths of education (school education and out-of-school education), types of education (general education, vocational education, special education, government service education, religious education, academic education, and professional education), and levels of education (basic education, secondary education, and higher education).

School education is organized in schools through teaching and learning activities that are gradual, hierachical and continuous. Indonesia has a 6-3-3-4 (primary [PS], junior secondary [JSS], senior secondary [SSS], higher [HE]) education system. In 1984, 6-year primary education was made compulsory, and was regarded as basic education. Basic education was extended to nine years from 1994 to include junior secondary education. Senior secondary and post-secondary schools offer both general, and technical and vocational education. Religious (mostly Islamic) schools are found at all levels, and since 1975 have been equivalent to general academic schools. In both, the core academic curriculum is identical, but religious schools offer additional religious instruction. There are five types of higher education institutions, both public and private.

Administrative jurisdiction is complicated. Primary schools are administered by the central Ministry for Home Affairs (MHA) through each provincial government. The Ministry of Education and Culture (MOEC) is generally in charge of general and technical and vocational education, whereas the Ministry of Religious Affairs (MORA) is in charge of Muslim schools at all levels. However, at both the primary and secondary school level, curriculum and examination policy are overseen by the MOEC. Higher education is administered by the MOEC, but MORA oversees the Islamic University. The fragmentation of administration is an impediment to educational reform.

Out-of-school education is organized outside formal schooling through teaching and learning activities that may or may not be hierarchical and continuous, and are referred to as non-formal education. Non-formal education includes basic literacy, primary and junior secondary school equivalency courses, income-generating, and apprencticeship courses, and is administered by the MOEC. The non-formal education system is recognized as having been very successful in helping to significantly reduce illiteracy.

1-3 Issues

MOEC has identified three principal issues facing Indonesia:

- (1) universalization of basic education, so as to create a broad human resource base;
- (2) improvement of teacher quality through all levels; and
- (3) improvement of both the enrollment and the education quality of higher education, to develop semi-skilled and skilled human resources.

These three issues are the subject of three sub-sector analyses, preceded by an analysis of education trends. Non-formal education, significant in reducing Indonesia's illiteracy rate, is the subject of a fourth sub-sector analysis. Following is the format of the rest of this report, which reflects the research programs of working group members:

- 2 Education Trends
- 3 Basic Education
- 4 Teacher Training
- 5 Higher Education
- 6 Non-formal Education

2. Education Trends

2-1 Achievements

There have been remarkable achievements in the Indonesian education system during the first 25 Year Plan (1969/70-1993/94). The number of primary schools increased by 85,886 (up 236%) during the 1969/70-1993/94 period, junior secondary schools,13,237 (up 334%), and senior secondary schools 8226 (up 432%). The primary school net enrollment rate (NER) improved from 58% in 1968 to 94% in1993. The junior secondary school gross enrollment rate (GER) improved from 17% to 54% during the same period, the senior secondary school GER from 9% to 34%, and at the higher education GER increased from 1.6% to 10%. Illiteracy fell to 16%, and female enrollmentsenrollments as a percentage of total enrollments at the primary school level increased to 48%. However, gender disparities persist and widen at the higher levels of education. In 1995, in primary schools the proportion of male students to female students was 48:52 in 1995, in junior secondary schools 59:41, senior secondary schools 65:35, and in higher education 63:37 (World Bank 1996).

Quantitative internal efficiency can be measured by the input-output ratio (minimum years to graduation divided by average years to graduation - 100% indicates no dropouts or repetitions). The input-output ratios improve with each education level, and improved over the decade 1983/84 to 1993/94 - for primary school from 78% to 80%, junior secondary school from 78% to 80%, and senior secondary school from 88% to 90%. (MOEC 1995). Qualitative internal efficiency is measured by EBTANAS (end of school level national examinations). Educational quality is widely considered to have fallen over the past 15 years, the cost of the expansion of the system.

External efficiency is estimated using the social rate of return calculated for 1991 - primary school education 4%, junior secondary school education 14%, senior secondary school education 11%, and higher education 5% (the Asian Development Bank, Indonesia Case Study Report, 1994). Another measure is the un- and under-employment rates. These are lowest for senior secondary in both urban and rural areas. Both these appear to justify the present expansion of secondary education.

2-2 Demographic and Education Change

Fertility has been declining faster than earlier predicted due to the success of family planning, to less than 2%. School-age populations are predicted to peak at each level in: 2002 at the primary school level, 2008 at the junior secondary school level, 2013 at the senior secondary school level, and to continue expanding into the foreseeable future at the higher education level. However, the demand for education will not decline. On the contrary, declining average family size will cause high growth in demand for education, especially at the secondary and higher levels, because smaller families tend to invest more in educating fewer children more effectively and efficiently.

The prospect that the total number of primary school-age children will be falling within 10 years provides an opportunity to improve the quality of the education system in all levels, as more resources could be provided to other education levels even if primary school unit costs are maintained at the same level. One of the major challenges facing the education system is to improve the quality of education, both internal efficiency (to reduce wastage - dropouts and repeaters, and improve examination results) and external efficiency (relevance of graduates'skills). The other major challenge is to improve access to rural and isolated areas, where 85% of the under 20-year old population lives. The Sixth 5-Year Medium Term Development Plan (REPLITA VI) emphasizes the three issues of improving access, quality and efficiency. Moreover, the 1996/97 Government Budget increased education funding substantially, indicating the Government's commitment to education. Planning and implementation management is to be gradually devolved to the provincial and district levels, to increase system accountability.

3. Basic Education

3-1 Universalization of Basic Education

Indonesia is sustaining a commitment to extending the universalization of basic education. Universalization of primary school education, introduced in 1984, is expected to be attained by 1998. Compulsory junior secondary school education was extended in 1994, and is expected to be attained in 2004, having been revised forward five years from 2008/9 by President Suharto this year. The universalization of senior secondary education is planned to occur in 2013. This commitment has required, and will require, major financial, management, technical, and social input. The Government appears willing to sustain this commitment, and to continue the successful course of universalizing general education.

3-2 Main Challenges

The main challenges facing the government are how to sustain and quicken the pace of

quantitative expansion while at the same time improving the quality of education. Until now, the government has prioritized quantitative expansion, often at the cost of educational quality. Not only has this decreased the internal efficiency of education, but also decreased the demand for education, as parents have perceived the quality of education as being simply too low to be worth the relatively high direct and indirect costs of education in Indonesia. This represents an obstacle to further quantitative expansion. The main strategy to improve educational quality is twofold - firstly, to improve teacher pre-service and in-service training, including teacher skill upgrading, as detailed in the next section; and secondly to improve the quality of school inputs, particularly by providing free textbooks to all students. Both responses are being partially funded by international assistance.

The following sections focus on the expansion of the junior secondary school level. Both public and private schools, and non-religious and religious schools, provide junior (as well as senior) secondary school education.

3-3 Administrative Structure

The administrative structure is rather complex: this impacts on the planning and delivery, as well as quality, of education. Religious schools are administered by the MORA. Non-religious schools are administered mostly by MOEC, which also is responsible for curriculum and examinations. Other central government ministries also operate junior secondary schools (for example, Health, Defence, and so on). That primary schools are administered by MHA means that, unlike Thailand, primary schools cannot extend to offer junior secondary school education. Lastly, junior and senior secondary school pre-service teacher training is provided at the higher education level, whereas inservice training is administered by the Directorate-General of Primary and Secondary Education (DGPSE) of the MOEC. Even though higher education is also administered by MOEC, it is under a different Directorate-General to the DGPSE. The fragmentation of the administration of education in Indonesia is greatest at the junior (and senior) secondary school level.

3-4 Rationale

The rationale behind the expansion of junior secondary schools is twofold - firstly, to prepare the ever-increasing number of students proceeding to higher education; and secondly, to meet the evolving needs of the Indonesian labour force. The Indonesian labour force is not highly educated, particularly compared to other ASEAN countries - its average education attainment per adult is less than 5 years. More specifically, there is adequate unskilled- or low-skilled labour- but shortages of trainable and higher skilled labour. Junior secondary schools should teach ways to think, enabling graduates to be trained appropriately by their future employers. Higher skille labour, graduates from universities, must be given a solid educational foundation before entering university. Junior secondary schools are a key link in meeting future needs of the Indonesian labour force.

not impossible. The full social cost of expanding junior secondary education is expected to require USD7.6 billion over the next 10 years. Three sources can be identified. The first is the government budget. Most governmental financing of education comes from the central government, with minimal financing coming from the provincial governments. The central government allocation to education is 2.9% of GDP, or 15% of the central government budget. This is comparatively low. The proportion allocated to junior secondary education is also comparatively low - 13% of the total education budget. Even assuming a 6% growth per year in the junior secondary school allocation, in line with overall budget, education budget and economic growth predictions, funds will be inadequate. Even if the minimum budget allocated to junior secondary education increases to 16% of the total education budget, from the present 13%, there will be at least a USD1.2 billion shortfall over the next 10 years. This assumes that private education maintains its 40% share of enrollments, even as enrollments increase. If private education only manages to maintain a constant 3 million student enrollment, then the shortage would be USD3.2 billion. Either way, the government budget will be inadequate.

Public junior secondary schools are ostensibly free. Private schools require fees, and this is the second source of funding. Private education at the junior secondary school level is substantial -40% of total enrollments. To support the expansion of private junior secondary education, the central government is providing free textbooks to private school students, offering government financed in-service teacher training to private school teachers, paying some private school teacher salaries, and assisting in the construction of new private schools. However, the problem of education quality is particularly pronounced in private schools.

International assistance, particularly from the World Bank (5 projects, USD500m), Asian Development Bank (2 projects, USD m), and the OECF (project, USD m), is perceived as the major source covering the central government shortage. As the capital costs of new school construction and teacher training falls at the beginning of the 10 year period, and as the central government budget continues to expand, the shortage of central government funds is expected to be overcome by 2005. However, there are concerns about the levels of international indebtedness of the Indonesian central government.

The costs met by parents and families are referred to as private costs. There are two types of private costs - direct and indirect. Direct costs for junior secondary school students - school entrance fees, parent - teacher association contributions, uniforms, and class materials and textbooks - are reasonably high. Indirect costs are also high - long commuting times in rural areas increase the opportunity costs of junior secondary school education in rural areas, as do rising urban wages in urban areas.

There is a strong relationship between the cost of education and enrollment, so to successfully expand junior secondary school enrollment the government recently abolished junior secondary

There is a strong relationship between the cost of education and enrollment, so to successfully expand junior secondary school enrollment the government recently abolished junior secondary school fees, and is implementing a scholarship scheme, although still on a small scale. Moreover, the construction of new schools in rural and remote areas, and the provision of alternatives to regular schooling - free open schools and free junior secondary school equivalency programs through non-formal education (Packet B) - are designed to minimize direct and indirect private costs, and hence maximize enrollment in the areas where enrollments would otherwise be low. Furthermore, as there is a strong relationship between economic growth, real wages and enrollment rates, the continued broad-based economic prosperity of Indonesia will have a positive effect on enrollment rates.

3-6 Innovative Educational Approaches

The government is pursuing innovative educational approaches to expanding junior secondary education enrollment. Regular Schools have 27, 18 or 9 classes, but Small Schools (SMP Kecil) have 6 or even only 3 classes. Small schools are more expensive than regular schools, but are suitable for sparsely populated rural and remote areas. Free open schools (SMP Terbuka), or distance learning, offer the regular junior secondary school curriculum using regular school teachers based out of a mother school, but offer a much more flexible schedule. Through free non-formal education is offered a junior secondary school equivalency program (Packet B) for students who work. However, even though the teaching materials are better quality than in the open schools, the tutors are usually not teachers, the final exam is not equivalent to the regular school exams, and it are generally less accepted by the community. Lastly, the government supports the provision of junior secondary education through religious schools, the Madrasah. These are administered by the Ministry of Religious Affairs.

4. Junior Secondary School Teacher Training

The issues of quantity and quality re-occur in junior secondary school teacher training. To accommodate growing junior secondary school student numbers, more junior secondary school teachers need to be recruited, and existing teachers need to be retrained and upgraded. Teaching quality is generally recognized as being poor in Indonesia, and is a major issue needing to be addressed, as teaching quality is strongly linked to learning outcomes.

4-1 Teacher Demand and Supply

The demand for junior secondary school teachers is increasing. In 1994/95, almost 380,000 teachers taught 5.9 million students, so the student-teacher ratio was 16. The net enrolment rate is expected to climb from 41% in 1994/95 to 100% by 2004, when junior secondary enrolment is projected to peak at almost 13 million students. This will require almost 650,000 teachers, according to the Government-proposed student-teacher ratio of 20. In DI Yogyakarta, the student-

teacher ratio was 13; as student numbers are not expected to rise, there is no anticipated shortage of teachers there.

The global supply of teachers is at present adequate. However, there are teacher shortages in rural and remote areas, and in particular subjects (mathematics, local content, and so on); and conversely teacher oversupply in urban areas, and in some subject areas (Pancasila, Social Science, and so on).

4-2 Teacher Qualifications

Teacher qualification is a major issue. Since 1989, the minimum qualification for new primary school teachers is D-II (two year post-secondary diploma), for junior secondary school teachers D-III (three year post-secondary diploma), and for senior secondary school teachers S-I (four year bachelor's degree). From 1995/96, the minimum qualification for new junior secondary school teachers was upgraded again to S-I. Teachers with less than this level of certification are considered 'semi-qualified'. Under- and semi-qualified teachers are being upgraded at government expense. Even in 1992/3, only 51% of junior secondary teachers were considered to be adequately qualified - the upgrading of minimum qualifications will increase the proportion that are now considered inadequately qualified, presenting the government with the major challenge of upgrading present teachers's qualifications on a large scale.

Pre-service teacher training for teachers at all levels is administered by the MOEC Directorate-General of Higher Education, and is offered by LPTKs (teacher training institutes). LPTKs include IKIPs (Higher Education Teacher Training Institutes), STKIPs (Teacher Training Colleges), and FKIPs (faculties of education in comprehensive universities). Every province has at least an IKIP or FKIP, either public or private. Instruction is also offered through distance learning by the Universitas Terbuka (Open University). In each institute or education faculty there are six basic departments - education, natural science, technology, social science, humanities, and sports and health.

In-service training is administered by the MOEC Directorate-General of Primary and Secondary Education. Two of the major programs offered are the Qualification Upgrading Program and the Training Refresher Program. The Qualification Upgrading Program is targeted at under- and semi-qualified teachers. The D-II Equivalency Program for primary school teachers began in 1989, and the D-III Equivalency Program for junior secondary school teachers began in 1991. The S-I Equivalency Program for senior secondary school teachers, and more recently for junior secondary teachers, began in 1994/5, but has been less popular because teachers have to use their own funds. Teachers who do not have ready access to these courses can enter the distance learning programs offered by the Open University. Its student enrollments have been rapidly expanding. The Open University curriculum is identical to the LPTKs' curriculum.

The Training Refresher Program operates through 12 PPPGs (Teacher Training Development Centres) at the national level to develop curricula and activities for in-service training and to train

teacher trainers, and 27 BPGs (Teacher Training Development Centres) at the provincial level to implement and coordinate teacher training activities so as to serve the particular needs of each province. Four of the PPPGs specialize in particular academic subjects, and eight in vocational and technical subjects. Instructors at PPPGs are chosen from highly experienced school teachers, and trained at higher education level institutions to obtain at least an S-II (master's degree). BPG teacher trainers are also recruited from within primary and junior secondary school teachers. Every teacher in Indonesia is supposed to have an opportunity to be trained every five years. However, insufficient opportunities are provided, and the selection process of candidates is not clear.

At a more local level, each Provincial Office of Education and Culture itself conducts in-service training programs, using the human and physical capacities of the BPGs. At the sub-district level, English, Mathematics and Natural Sciences subject teachers of several schools, both public and private, gather to improve their competence. The MGMP program (teacher workshop by and for teachers) is held on average once every three weeks under the instruction of key-teachers, who have completed only a two-week training course. Teachers receive on-site visits to their schools to be observed.

5. Higher Education

Higher education in Indonesia officially began in the 1940s with the establishment of Gadjah Mada University in Yogyakarta and the University of Indonesia in Jakarta. Higher education enrollment was very small - of the then population of 65 million, only 3000 were enrolled in higher education institutions. Following the virtual universalization of primary education, and rapid expansion of junior secondary and senior secondary school education, higher education has also expanded particularly rapidly since 1970, the gross enrollment rate rising from 1% to 9% in 1990, and to 10% in 1994.

The Government of Indonesia has recognized that economic development must be based on the development of human resources, particularly skilled human resources. The expansion and extension of higher education is necessary as the basis of the government's human resources development plan, and the existence of a substantial higher education sector is a pre-condition of sustainable economic progress, and economic self-reliance. This commitment to higher education is reflected in the share of the total MOEC budget allocated to higher education - it increased from approximately 19% during REPLITA II & REPLITA III to 29% in REPLITA V.

5-1 Enrollments, Categories and Administration

Enrollments grew especially rapidly in the public universities between the early-1970s and mid-1980s. The number of public higher education institutions rose during this period from 40 to 48. With public enrolment growing more moderately after the mid-1980s, the number of private universities increased by nearly a third to 914, and student numbers tripled to 1.3 million, or 66% of total enrolments. Private higher education has come to be important in meeting the rapidly increasing demand for tertiary education. This rising demand is reflected in higher transition rates from senior secondary school to higher education.

There are five categories of institutions in higher education - universities, colleges, institutes, polytechnics, and academies.

Entrance to public higher education is primarily by means of a nationwide competitive university entrance exam, and a speical talent/intelligence search (PMDK). Options for those who fail include applying to the Open University, going to a private university, or attending another category of higher education institution.

Overall administration and supervision of higher education is coordinated through the Directorate-General of Higher Education (DGHE) of the MOEC. Public universities are under DGHE central administration, whereas administration of private universities is decentralized to 10 regional offices. The DGHE has a special relationship with the Ministry of Manpower, to coordinate human resources development, particularly training and vocational education.

The government does not intend to establish additional public universities to meet the increasing demand for tertiary education, but rather expects that additional enrollments will be accommodated by private institutions. The government's role is gradually shifting from that of simply directly providing higher education to catalyzing and supporting quality and efficiency improvement in both public and private institutions. This policy will continue in REPLITA VI, with greater emphasis on improving the quality of regional and private universities to develop a more coordinated system of higher education.

The higher education sector receives the highest proportion of external assistance provided to Indonesia, at almost 50%. External assistance is used for the establishment and construction of new facilities, training of faculty, extension of research activities, and to make student access more equitable by provision of scholarship and loans programs.

6. Non-Formal Education

In tandem with the vast primary school expansion program since 1973, the out-of-school education program was also expanded in order to cope with those who cannot benefit from formal schooling opportunities for various reasons.

6-1 Types

There are four main types of non-formal education. The first, the literacy campaign, is to help people learn to read, write and communicate in the Indonesian language, and to supplement basic education. The underlying idea is that by reaching-out to the educationally deprived and assisting them to overcome their lack of skills, these people will be empowered to function as equal members of their communities. The program to achieve this purpose is known as the functional literacy program.

The second type is to provide equivalency programs for primary and junior secondary school. The Packet A literacy program is considered equivalent to primary school. There are two Packet A programs - one is targeted at people aged 10-44, the other targets the 7 to 12 year age group, who have dropped out of primary schools or cannot attend primary schools. Packet B is equivalent to junior secondary school, and is provided to those who cannot attend formal junior secondary school or have dropped out. Packet B was developed in the context of extending compulsory basic education to 9 years.

The third type is to provide income generating programs, to overcome poverty by increasing income-generating ability. This program has been integrated with the functional literacy program since REPELITA IV. The fourth type is the apprenticeship system, which is targeted at the 15 to 29 year age group. It is designed to deepen and broaden the abilities of the semi-skilled.

6-2 Administration

The MOEC is responsible for non-formal education, through the Directorate of Community Education in the Directorate-General of Out-of-School Education, Youth and Sports, partly in cooperation with the Ministry of Manpower.

7. Conclusion

Indonesia's push to universalize and extend basic education is facing the challenge of maintaining educational quality, particularly through improving teacher quality and the quality of school inputs. The push to extend higher education is facing the same constraints; higher education must at the same time provide the labour force with appropriately skilled workers in adequate numbers. At both levels innovative approaches - small schools, multi-grade schools, and open schools in basic education, and the Open University at the higher education level - combined with curriculum change and development, are central to the government's strategy. Increasing the internal efficiency of the education system, combined with growing government budget support, is providing the financial means. Education is and will continue to play a central role in Indonesia's economic development.

Analytical Indicators - Republic of Indonesia

Note: various years, various sources

ACCESS / EQUITY	Primary School	Junior Secondary	Senior Secondary	Higher Education
Gross Enrollment Rate (%)	111	54	34	10
Net Enrollment Rate (%)	94	41	26	- 5
Women Students % Total	49	41	35	37
Private Students % Total	7	34	53	66
INTERNAL EFFICIENCY	Student Flow			
Repetition Rate (%)	8	1	1	
Dropout Rate (%)	2.8	4	5	
Cohort Survival Rate (%)	63	81	83	
Years per Graduate	7.76	3.46	3.35	approx. 6
EXTERNAL EFFICIENCY				
Progression Rate (%)	64	83	25	***
Social Rate of Return (%)	4	14	11	5
Urban Underemployment(%)	26	22	16	20
Rural Underemployment(%)	47	48	32	37

INSTITUTIONAL CAPACITY

For PS, JSS and SSS, institutional capacity differs depending on administrative level:

Level -

Central level:

adequate, and improving

Provincial level:

inadequate, but improving

District level:

inadequate, and not improving measurably

For higher education, institutional capacity depends on status of institution, and location : Status / Location - Major Public Universities : generally adequate

Regional Public Universities: generally inadequate, but improving Major Private Universities: not particularly adequate, but improving Minor Private Universities: inadequate, not improving markedly

Academies, Institutes, etc : generally inadequate, but capacity variable

Proposals for the Education Sector

Proposals	Increase education funding: a) to all sub-sectors b) channel funding to textbooks, facilities, and teacher training	Devolve education planning & implementation to the provincial and district levels
Objectives	to increase quantity of inputs into the education system	Increase education administration efficiency
Target Population / Area	all Indonesia, prioritized to poorer provinces and districts, and rural and remote areas.	1) All of Indonesia 2) JSS and SSS levels
Executing Agencie	MOEC, MORA, MHA	MOEC Provincial Offices MORA Provincial Offices
Manpower Implications	none	Requires institutional capacity-building at - provincial, district and school levels
Financial Implications	1) greater education sector allocation 2) greater government budget	Greater devolution of control of budget Greater contribution from provincial and district requires government taxation reform
Remarks	1) education / GDP is lower than other ASEANs 2) education / government budget is lowest in ASEAN 3) increasing reliance on ODA	Devolution increases efficiency due to better matching of educational resources to education needs Devolution increases system accountability

Proposals for the Education Sector

Proposals	Teacher Training : overcoming supply-demand mismatch 1) change pre-service training faculty quotas 2) strengthen provincial office ability to assign teachers	Teacher Training: teacher quality improvement 1) Qualification Upgrading Program (QUP) teacher scholarship / study release program (QUP)
	institute financial incentives for remote area tea ers	strengthen in-service institutional capacity improve teacher instructional support materials
Objectives	Improve match of teacher supply-demand for subjects and location	Improve teacher quality
Target	1) subjects : all Indonesia	All Indonesia
Population /	- maths, science, languages	
Area	2) location : rural and remote areas	36 23 3 3 3
Executing	MOEC - DG of Higher Education	MOEC - DG of Primary and Secondary Education
Agencies	MOEC - DG of Primary and Secondary Education	
Manpower	No quantitative increase, but better allocation	relief teachers required to cover teacher study release
Implications		2) in-service training support personnel required
inancial	remote teachers' salary would increase	QUP requires extra funding
Implications	total teacher salary budget only marginally	2) in-service upgrading requires extra salary budget
Remarks	teacher supply-demand mismatch is a major problem	teacher quality is pre-requisite for education quality
		2) training essential to improve teacher quality

Proposals for the Education Sector

Proposals	Strengthen Non-Formal Education (NFE) by: 1) Increasing budget, and tutor pay 2) Strengthening institutional capacity 3) Develop curriculum Integration with the formal school curriculum	Improve Higher Education (HE) by: 1) reorganization of financial inputs, by - increasing cost recovery from public universities - selectively subsidizing quality improvements in private HE 2) improve HE quality
Financial	NATIONAL PROPERTY AND ADDRESS OF THE PARTY O	3) increase linkages with industry
Objectives	Improve NFE education quality Improve NFE relevance Improve NFE administration	 To better align private and social rates of return, at the same time improving private HE quality improve student outcomes, improve education quality better matching of labour force demand and supply for skills
Target Population / Area	All Indonesia, prioritized to poorer provinces and districts, and rural and remote areas.	All of Indonesia, especially regional universities and private universities
Executing Agencies	MOEC	MOEC - DG of Higher Education
Manpower Implications	Tutor numbers will increase with expansion of NFE enrollments	none
Financial Implications	Greater NFE sub-sector allocation	 Some budget re-allocation from public to private institutions contribution from industry
Remarks	1) NFE demand exceed supply 2) tutors severely underpaid 3) curriculum - mismatched with local needs - equivalency programs inadequately linked 4) institutional capacity : need to establish management information system - monitoring and evaluation system	 private rate of return is greater than social rate of return, indicating excessive subsidization HE quality is very variable graduate unemployment and skills shortages indicates course mismatching

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Working Group 3

Environment and Infrastructure

Working Group 3

Environment and Infrastructure

1. General introduction

The Indonesian economy has been developing rapidly through government promoted industrialisation, causing various environmental problems. This has created a situation whereby it has become important for the government to attach greater importance to rectifying them; rivers remain contaminated in urban areas and poor people cut trees illegally to sell in rural areas. Working group III focused on three issues, Water supply, Waste disposal and Deforestation in Yogyakarta Special Province.(D.I.Y.) The following section identifies the nature of these problems and policy proposals are made in subsequent sections.

National Environmental Policy

In Indonesia a great deal of environmental legislation has been enacted in recent years. Environmental law enforcement is conducted by BAPEDAL. This department struggles to combat environmental pollution problems actively. While emission regulations exist (some standards are as high as developed countries such Canada) the implementation and enforcement of such regulations remains less than optimal. AMDAL (Environmental Impact Analyses) is a important system in the environmental policy. This form of analysis is required for the environmental assessment of all projects which may cause environmental degradation. 4291 analyses were performed in 1995. The government also conducts campaigns for environmental improvement.

2. Water Supply

2-1 Water resources

Yogyakarata special Region(D.I.Y.) is the second smallest province in Indonesia. There is a big gap in the amount of water between the abundant-water area at the foot of Mt.Merapi (3,500-4,000mm/year) and the eastern dry area(1,500-2,000mm/year) in D.I.Y. While people have ready access to water in Sleman, Bantul and Yogyakarta municipality and there is a protected forest area for water catchment in Bantul, the situation is different in karst mountain areas, especially in Gunung Kidul .Residents must draw water from deepwells because most of the rainwater filters through theporous limestone bedrock. The water table is thus subterranean and water shortage

is thus aserious problem in dry season in this area. People are supplied with water from dams, wells, rivers, springs and reservoirs while others, in more abundant-water areas, dig shallow-wells. There are 42 water sources in Yogyakarta municipality.

2-2 Piped Water Supply Service

In urban areas, piped water supply service was first implemented before Repelita I (1st national 5 year development plan), but in rural areas infrastructure was first started in Repelita V. In 1978/79, 203,100 people (7.5%) had access to piped water. Water supply service were extended to 592,000 people (19.8%) by 1988/89 and to 1,410,500 people (45.6%) in 1993/94. Nowadays about half of total population in D.I.Y. has access to piped water supply services. The International Drinking Water Supply and Sanitation Decade (IDWSSD, 1981-90) was named at the International Conference for Water in 1977. According to the conference findings, drinking water supply systems in developing countries have been undertaken by UNDP, WHO and NGOs. This conference influenced Repelita and water supply service projects in Indonesia. Repelita attached much importance to water supply capacity and started the extension of the system. Piped water supply service in rural area in D.I.Y. thus began in this period. The ADB and OECF have provided support to construct IKK (Ibu Kota Kecamatan: water supply facilities for 3,000-20,000 people district), to improve facilities and to extend access to water pipes in D.I.Y.

In Yogyakarta municipality, piped water supply service was first provided by the Dutch Government in 1918 to areas around the royal palace and to military facilities. This city is the most densely population area in D.I.Y. (The D.I.Y. is the second highest densely populated area.) Repelita indicates that densely populated areas should be given priority in construction of water supply. The city is divided into 12 Kecamatan (subdistricts). More than 53% of the population of all Kecamatan have access to a water supply and 8 Kecamatan achieved more than 50%. Kecamatan Kotagede, in which still only 33%, have a piped water supply service later than other Kecamatan. Some people have access to services managed by PDAM (Perusahahaan Daerah air Minum = Public water supply service company), but others don't. The number of households with a water suply has increased every year, especially in the 1989-1993 period. (Fig-1,Fig-2). In recent years, water distribution was less than water production. This gap represents UWF (unaccounted water flow; Fig-3). The majority of UWF is caused by water leakage and it is very difficult to measure. PDAM manages the (piped) water supply system in each region. It was established in 1967 in Yogyakarta municipality and is responsible for the following:

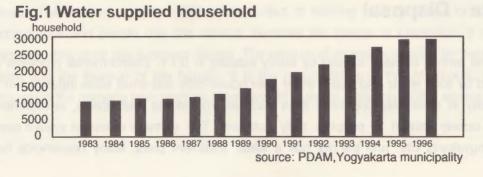


Fig. 2 Public Hydrant

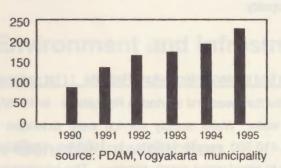
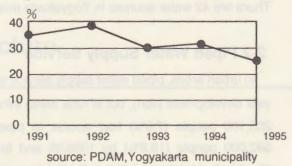


Fig. 3 UHW



- 1. Water supply service in Yogyakarta municipality
- 2. Control of water quality
- 3. Research activities (PDAM in Yogyakarta municipality is monitor by central government)
- 4. Management of swimming pool

PDAM has 292 staff, including 3 engineers and 10 people working in technical works. However, there is no sanitary engineer. As mentioned above, about half of the people in the city cannot access a piped water supply service. They usually use shallow-wells. Poor people particularly tend to use shallow-wells because they can get water from them easily and the charge for piped water is not so cheap. Underground water is contaminated by drainage soaking into ground which can cause health problems among poor households. It is well-known that many diseases are transmitted by unsanitary water.

2-3 Problems

Problems relating to water supply in Yogyakarta municipality are as follows:

- 1. Half of the population can't access a piped water supply service
- People cannot drink without boiling piped water because purification is not appropriate.
- Shallow-wells are polluted by drainage.

Policies, such as expanding the system are often affected by budget constraints.

3. Waste Disposal

There is no serious damage caused by heavy industry in D.I.Y. Environmental problems are mainly caused by solid waste and waste water from households and small scale industries in the area. Especially in a densely populated area such as Yogyakarta municipality, environmental problems are closely related to people's daily activities. The garbage collection system covers most of the Yogyakarta city, and the city has a water treatment plant. Many households have

septic tanks. Indonesia has strict standards for pollutant emissions. But rivers in this city remain and continue to be polluted. What causes such a situation in the city? How should the government treat this kind of problem?

3-1 Solid waste disposal System

a. Administration

The Indonesian government has conducted a number of campaigns to improve the environment. The most important one is ADIPURA (Clean City Program, 1986~). This is a form of city competition where the presentation of Presidential awards are presented to cities that accomplished high standards of environmental cleanliness, based on certain criteria. (Management, Physical, infrastructure, sanitation, amenity). Yogyakarta won this award in 1994 and 1995. PROKASIH (Campaign for Cleaning river ,1988~) aims at the improvement of river water quality. This entails activities to reduce the pollution load discharge into the river by companies, especially heavy industry. The campaign covered 1395 factories and 31 river basins across Indonesia in 1994/95.(BAPEDAL,1995). These campaigns give a strong motivation to improve the environmental situation, including solid waste management.

The solid waste disposal is separated into three areas; collection, transport and final disposal. Transport and final disposal are the responsibility of a public service agency, DKP (Dinas Kebersihan dan Pertamanan = local cleaning office). DKP is an office of the Yogyakarta municipal government. It is responsible for solid waste disposal, waste water treatment and a number of other public works. Garbage is collected at certain points by DKP's trucks at the responsibility of each community. Illegal dumping is punished by penalty.

b. Collection

As mentioned above, each community is responsible for garbage collection. Community organisations sometimes clean up roads and other public places in their neighborhood. Indonesia household garbage is generally collected together, not separated as in Japan. There are five modes of collection.(see Fig.4) TPS(temporary disposal site), Transfer Depo and Bak container is the same kind of collection.(They are different in the size or shape, but their functions are almost the same.) People carry their garbage in a small cart or plastic bags to these points and have to pay a collection charge. Jemput Bola is similar, but it does not have a certain place to store garbage. DKP trucks collect garbage directly at the street side collecting points. People have to wait for the truck. The last one is where DKP trucks collect at building such as shops or hotels. Only some companies and people use this service, because the charge is expensive. If people want this service, they must pay a certain charge. The amount of money is decided by their situation (family size and the location of the house). It is the responsibility of PASAR (public market office) to transport the garbage from markets (there are 32 markets in the city). DKP assists in this task.

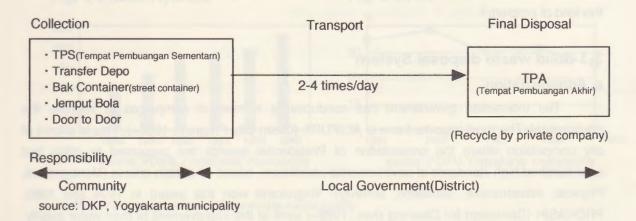


Fig.4 Normal Garbage Disposal System in Yogyakarta city

c. Transport and Final disposal

All garbage collected in Yogyakarta municipality is transported to TPA (the final disposal site) and dumped here. This city disposes garbage at only one TPA, which is located in Piyungan, Bantul. The TPA is usually built by the central government and managed by local government. In this case the TPA was built with central budget funds and Swiss ODA in 1995. It is a sanitary landfill site which has a water treatment facility, pipes used for removing gas and a 50cm clay sheet at the bottom. Garbage is covered with earth everyday. Trucks go to and from this site 2-4 times a day. Some forms of garbage (glass bottles, plastics, papers, metals) is recollected by scavengers. About 100 scavengers live near TPA. These materials are recycled through city traders(private company).

d. Special waste

All forms of waste cannot be disposed together. Industrial waste often contains toxic substances. Each factory is responsible for its toxic waste and usually have their own disposal site or treatment facilities. The government regulates such waste emissions strictly. Clinical waste is also dangerous waste as it too may become the source of infection and thus it is required that such waste also be incinerated. This is the responsibility of each hospital under the supervision of the Ministry of Health. While main (public and private) hospitals have their own incinerators, smaller hospitals which cannot afford to have one are allowed to use those operated by public hospitals.

Present Situation

a. Yogyakarta Municipality

Yogyakarta municipality can be said to rank highly in Indonesia in solid waste management. According to DKP, they contract (charge) to collect garbage from about 85% of households (temporary collecting points is 70%, door to door is 15%, other 15% is dumped illegally.), and nearly 99% is collected. The amount is 1500m3, 375t / day.(DKP,1996). Most of the garbage is organic and other materials are partly recycled by private companies. There is no way to do the

same with organic waste at present in Yogyakarta. Municipal government is now testing composting this kind of waste. Areas of Bantul and Sleman use this TPA in Piyungan also. It has a capacity to dispose about 3.5 million m3. The government plans to use it until 2025. Furthermore a new TPA is planned for 1997. Thus the capacity exists to dispose of all of the city's waste.

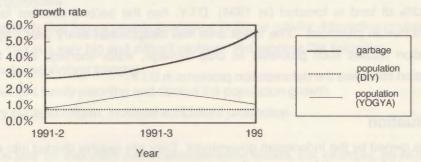
b. Rural area

In other districts, few people use the garbagecollection service. While there are six TPA in D.I.Y the garbage collection rate in the whole of DIY is only 54% (JICA,1994). It is common in rural areas for people to dump garbage in their own garden because the public service covers only those areas which generate large amounts of garbage. Only in sparsely populated areas is it possible to dispose of garbage in this way without serious environmental degradation.

Problems and Perspective

Yogyakarta municipality has a well-regulated waste collection system and enough capacity to dispose of it. Problems exist however. Firstly the amount of garbage is projected to increase rapidly in the future (Fig.5). The rate of increase in garbage is much higher than the population growth rate. Thus the garbage increase is not only caused by population increase, but by changes in life-style. Even now, some TPS are troubled with the over-loading of garbage. If garbage maintains this high rate of increase, government will be forced into additional steps to deal with the situation. For example, the construction of new TPA or intermediate disposal plants such as an incinerator to reduce the volume of garbage. However, additional problems exist such as high costs and contaminated by-products.

Fig.5 Amount of Garbage



source: Department of Forestry in DIY

The Second problem is illegal dumping. As mention above, 15% of households aren't covered by the DKP service. Uncollected garbage is sometimes cast into the river and causes serious problems such as water pollution and obstruction of smooth sewage flow. We can give two reasons; 1) people have very little knowledge about water pollution. 2) poor people cannot pay the garbage collection charge. Collection is the duty of the community who can play a big role in addressing this problem. The government may be able to assist by conducting environmental education campaigns to promote community activities.

3-2 Waste water treatment

Waste water treatment is more important. It is a duty of DKP, too. Yogyakarta municipality has two treatment plants. The new one (IPAL) has been in operation since 1995. It was built by JICA and it is equipped with high technology facilities and has the capacity to cover all the population. The sewage system covers only 13% of the population in Yogyakarta municipality today. The government plans to extend the sewage system in future (22% in 2002, 53% in 2012.). The old plant is located in an environmental engineering laboratory (BTKL) and, though built more than 60 years ago, is still operating well. It's capacity is very small, however, only 3% (15,000 people). For many people without access to the sewage system, the septic tank is a common way to treat waste (human waste and domestic waste water). More than 50% of people use this method. Septic tank sometimes leak waste water which contaminates underground water, and need regular maintenance to remove sludge.

Those who don't have even a septic tank allow waste (water) to flow into a river directly. This causes serious river pollution, and is a much greater source of pollution than treatment water from sanitation plants. Furthermore, such garbage hinders smooth sewage flow, making it difficult to manage the system effectively and efficiently. Large companies have their own treatment plant because the government regulation is limited

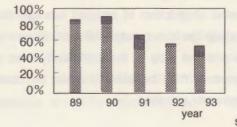
4. Deforestation

Despite its small forest area, deforestation in D.I.Y is regarded as one of the region's most serious environmental problem. Most mountains are bald because of over-cutting and consequent water shortage. Only 5.3% of land is forested (in 1994). D.I.Y. has the second smallest forest area throughout the Indonesian provinces. The forest area has disappeared every year (by 4.8% in 1988). Deforestation causes such problems as crop damage, water shortage and fuel-wood shortage. This section considers the deforestation problems in D.I.Y.

4-1 Present situation

All forest area is owned by the Indonesian government. They are roughly divided into 4 kinds of area in accordance with use: protection area, conservation area, production area and conversion area. Deforestation in protection and conversation areas is mainly caused by illegal cutting (Fig.6).

Fig.6 The Origin of Deforestation in D.I.Y.





source: DKP, Yogyakarta municipality

Illegal Cutting

Illegal cutting is mostly caused by fuel-wood collection. The population of D.I.Y. increased by 153,535 people in 1987-1994. Rural people cut trees for a living and even in the well-managed forest areas such as Wanagama, illegal cutting still occurs. In 1994, the financial loss from illegal cutting and fire was 5.3 millions RP. In rural areas, some of the poor cut the wood to earn money. Every 5 kilograms fuel-wood can be sold for 500 RP and is thus an attractive income-earning opportunity. Moreover, some people in rural areas use wood as fuel. Therefore, although there are penalty regulation, people still regard it worth the risk to cut trees illegally. There are 6 forest police stations in D.I.Y. About 100 forest rangers trained in the military work there and aim to patrol the forest to prevent illegal cutting. They also play a role as fireman when the forest-fires break-out. Due to budget constraints, they are suffering from a lack of human resources and equipment. According to Government Development Expenditure by Sector, the share of Forestry is 33 billions RP. This comprises only 2% of the agricultural budget (956 billions RP).

Reforestation

The government has been setting up reforestation programs all over the Province. Each program is managed to recover forest area, prevent soil erosion, protect agricultural products from sunshine or wind and so on. These purposes are sometimes distorted by other "beneficial" factors which often causes further destruction and extend inequality. D.I.Y. government puts great emphasis on tourism, rather than on forestry. Therefore, unless the government changes it's policy priority, the situation will continue in the future.

4-2 Proposals

- 1. It is poverty that forces people to engage in illegal activity. Alleviating poverty can reduce illegal cutting. This is a very big and difficult problem. We propose the following:
- Promote technology transfer.
- Implement family planning and control the population growth.
- Carry out land reform, increase agriculture production
- 2. NGOs play an important role in environmental issues. For example, an NGO has promoted the use of an improved cooking stove which is more efficient than previous models. It would reduce fuel-wood consumption by 50%. Even this program has not been successful because basic raw material for the stove are not readily available and people do not yet fully understand how to use it. It is important to support these activities through promoting them with foreign financial aid and providing continuous technical assistance. If NGOs have enough resources they can obtain the basic raw materials, realise technical transfer to make better new stoves, and conduct a campaign to educate village people how to use the new stove properly.

5. Conclusion

Water treatment is the most serious problem in Yogyakarta. Althought water is readily available, potable water is limited in supply as contaminated water offsets the effect of water treatment. Deforestation is related to this problem, too, because water supply is affected by water catchment capacity of the forest, especially in mountainous areas. These problems are caused mainly by the following four issues that are closely related with environmental factors.

1) Facility shortage

The extension of water supply and sewage system have a priority over all other matters yet sewerage pluming is delayed. This depends on governmental assistance. The system will be extended and improved every year if the policy is continued but it will take long time due to budget and resource constraints, especially in suburban areas. Will residents have to wait? Assisting NGOs could cut through this delay. One NGO plans to build small scale sewage system in villages. The government should support such projects.

2) Low skill

A high technology plant is difficult to maintain. This is partly because of the low skill levels of staff. It is necessary to train specialists for this type of work. Engineering education is being undertaken by the government but there are still as yet very few specialists. Equipment shortage in training centers and offices aggravate the situation. ODA can support this problem.

3) Low income

Those who cannot pay the charge for garbage collection or sewage use cast their wastes to the river illegally. Most of the environmental problems are related with poverty. Poor people often have to use contaminated shallow-well and tend to cut trees illegally.

4) Lack of knowledge

As mention before, illegal casting is caused also by people with little knowledge about the environment. It is same in the deforestation problem. People, especially poor people, are often not aware of the negative effects of environmental degradation partly because of their customary activity, for example they are using wood to make fire instead of gas as their parents did. It is a key issue that the government (or NGOs) help people to have an appropriate education about the environment. The government can regulate and educate them. But regulation is already restrict and it is difficult to control all the emissions. It is better that the community assume the responsibility for their pollutants and degradation to some extent.

It is not easy to solve these problems. The government must pay enough attention to them and give enough assistance to each communities' or NGOs' environmental efforts.

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Figure sources

Fig.1-3 PDAM, Yogyakarta Municipality

Fig.4-5 DKP, Yogyakarta Municipality

Fig.6 Department of Forestry, D.I.Y.

Working Group 4

Institutional Development

Working Group-4

Institutional Development

1. Preface

In Indonesia, Public Administration from the Central Government to the Local Government is well organised. In fact, all kinds of development programs that can be found in developing countries now, are implemented by Indonesian Government as a part of its Development Policy, not by NGOs. In such circumstances, what role do Indonesian NGOs play in the development process?

WG-4a for Development Administration focused its research on the co-ordinating structure of local development institutions and the level of efficiency for the policy implementation programs.

WG-4b for NGOs paid attention to the analysis of developmental problems from the broad viewpoint of development.

Due to a divergence in study aims, WG-4a and WG-4b do not integrate their reports. Because of the limited space, leaders of WG-4a NAKASHIMA and WG-4b KINUTA wrote their reports separately, utilising a summary of each group members' individual reports.

2. WG-4a Local Development Administration in DIY

2-1 Introduction

Before visiting Indonesia for OFW'96, Working Group-4a concluded that the most important issues of Indonesia's Development Administration were (1)Balanced Development(among regions, sectors, and income classes) and (2)Poverty Alleviation.

From this viewpoint, WG4a paid attention to three development policy implementation Programs: the Cooperative Promotion Program(especially Village Unit Cooperative, KUD) as the Government policy f or balanced development between the sectors, the Family Welfare Movement(PKK)

Program as the Government policy for WID and the Presidential Instruction For Less-developed Village(IDT) Program as the Government policy for poverty alleviation. NAKASHIMA studied the coordinating structure of public administration for promoting integrated development policy, focusing on these three programs.

Having completed OFW'96, WG-4a recognizes that the most important issues of Indonesia's Development Administration exist in (1)Balanced Development and (2)Poverty Alleviation to a far greater extent than perceived at the onset of the research. The following is the report on development administration in the case of Yogyakarta Special Province(DIY).

2-2 Development Administration in Indonesia

(1) Local Public Administration Structure

The Republic of Indonesia adopts the presidential political system based on the Constitution proclaimed in 1945. This constitution imbues the Indonesian President with considerable power and responsibility in all fields of public administration. Indonesia's President is responsible for the implementation of the National Guideline(GBHN) which is decided every 5 years by the National People's Assembly(MPR), the highest organ of state. The Line of Public Administration(Chart.1) at the local level is composed of heads of each level from President and the Minister of Home Affairs at the national level to the Chief of Neighbourhood at the sub-village level.

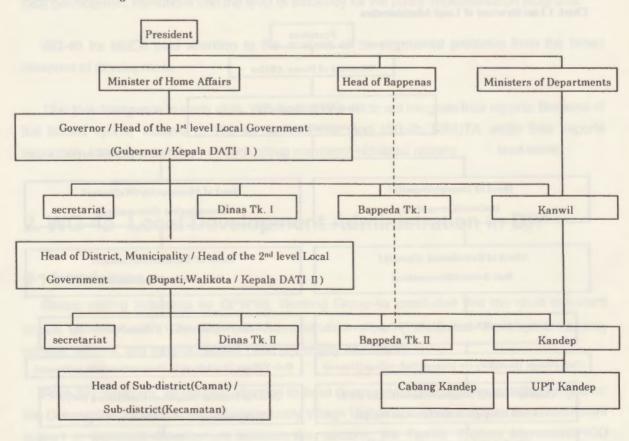
Chart. 1 Line Structure of Local Administration President Minister of Home Affairs Governor(Gubernur) / Province(Propinsi) (Rural Area) (Urban Area) Head of Municipality(Walikota) / Head of District(Bupati) / District(Kabupaten) Municipality (Kotamadya) Head of Sub-district(Camat) / Head of Sub-district (Camat) / Sub-district(Kecamatan) Sub-district(Kecamatan) Village Head(Kepala Desa) / Village(Desa) Village Head(Lurah) / Village(Kelurahan) Sub-Village Head(Kepala Dusun)/Sub-village(Dusun) Sub-Village Head(Kepala Dusun)/Sub-village(Dusun) Chief of Federal Neighbourhood(Ketua RW) / Chief of Federal Neighbourhood(Ketua RW) / Federal Neigbourhood(Rukun Warga) Federal Neigbourhood(Rukun Warga) Chief of Neigbourhood(Ketua RT) / Chief of Neigbourhood(Ketua RT) / Neigbourhood(Rukun Tetangga) Neigbourhood(Rukun Tetangga)

In urban areas all the Heads of Municipality (Walikota), Sub-district (Camat) and Village Head (Lurah) are national servants (pegawai negeri) under the control of the Minister of Home Affairs.

The President bears final responsibility for Public Administration. All Governors, heads of provinces, have direct responsibility to the President as do all Ministers. Governors have territorial responsibility in each province while Ministers have functional responsibility for co-ordinating the policies of each Departments. The President thus controls all elements of local public administration. Thus it is imperative that he is assisted by both local government and Departments. In local public administration, the most important Departments are the Department of Home Affairs responsible for the general affairs of local public administration, the National Development Planning Agency(Bappenas), responsible for the co-ordination of local development planning and the Department of Finance. In addition, the President has high ranking staff: State Secretary Minister, Co-ordinating Ministers, and so on.

The keywords in the relation between Central and Local Government are the concepts of Decentralization (Disentralisasi) and Deconcentration(Dikonsentrasi). Decentralization means that Central Government gives authority(devolusi) to Local Government(line of Dinas). On the other hand, Deconcentration means that Central Departments give authority to their Branch Offices(line of Wilayah) (Chart.2).

Chart.2 Central / Regional Public Administration Structure



The Head of Local Government has the authority to coordinate all local public administration activities in its jurisdiction. There are two levels of local autonomy: The first level is the is Province(Propinsi), while the second level is District(Kabupaten). The Sub-district (Kecamatan) does not have an autonomous function.

The Governor (the Head of Province) is the head of the first Local Autonomous Body. The Governor is thus in charge of Central Government's Administration Branches(Wilayah) and the Local Public Administration Area(Daerah). The Governor is Head of Daerah while also heading the Wilayah(Kepala Daerah dan Kepala Wilayah). The Secretariat of Governor (SETWILDA) and Regional Development Planning Agency (Bappeda Tk. I) assist the Governor in co-ordinating province level public administration. Bappenas does not subordinate to Bappeda Tk. I, but assists in preparing provincial development plan from the viewpoint of the nation-wide Development Plan.

The Governor has the authority to coordinate all Offices in his Province. However, officials of Central Government Department Branch Offices(Kanwil) are national servants and receive their salary from the Central Department's Budget, though Officials of Secretariat, Bappeda Tk. I and Province Government's Divisions(Dinas Tk. I) are local civil servants and are paid through the recurrent expenditures of the Provincial Budget. The Local Development Project Budget of Wilayah lines(Kanwil, Kandep, Cabang Knadep and UPT Kandep) come from the Central Departments' Budget. According to our interviews, some high officials said that there was no problem about dual control from Governor and Minister, because of the Governor's status as the representive of the President in his Province. The Governor has the authority to coordinate between Dinas and Kanwil.

(2) Local Development Policy Planning Coordination

The planning process in Indonesia is a combination of top-down and bottom-up approaches. The "top-down" approach is the implementation of the planning process from central long-term plan to local short-term planning: that is, from 5 year National Guidelines(GBHN) to National level Five-Year Development Plan (REPELITANAS), Local level Five-Year Development Plans(REPELITADA), Local Level Yearly Development Plans(REPETADA), and yearly Local Government Budgets(APBD). On the other hand, the "bottom-up" approach is the proposed direction of the planning process from Village Proposal to national development planning coordination: from Village Development Plan Meeting (MUSBANG) to Sub-district level Development Plan Meeting(TEMU KARYA PEMBANGUNAN), to District level Development Coordinating Meeting(Rakorbang Tk. II), up to the Province level Development Coordinating Meeting(Rakorbang Tk. II), and from that up to the National Development Plan Consultation (KONNASBANG).

At the province level, the Governor has the authority to coordinate all public administration in his Province, including provincial development policy making. The Province level Bappeda Tk. I

(Regional Development Planning Agency) is expected to play the role of leading actor in local development policy coordination. Since budgeting is an important part of public administration activities, coordination of policy and budget before implementation is an important aspect of Development Administration also. Bappeda assists the Head of Local Autonomy to coordinate Local Five-Year Development Plans (REPLITADA), Local Yearly Development Plans (REPETADA) and annual Local Development Budgets (APBD).

The Province level Five-Year Development Plan(REPLITADA Tk. I) and Yearly Development Plan (REPETADA Tk. I) are prepared by Bappeda Tk. I based on coordination at a Development Coordinating Meeting (Musyawarah Pembangunan or Rakorbang Tk. I). The Development Coordinating Meeting is held at Bappeda Tk. every year having about 40 members that consist from officials of each Office and the members of Local Parliament(DPRD) as representatives of the local society(Chart.3). At the District (Kabupaten) Level, Bappeda Tk. II (District level Development Planning Authority) plays a core function of development policy coordination under the control of District Head as well as provincial Bappeda(TK. I).

President Minister of Home Affairs State Minister/Head of Bappenas Department of Home Affairs National Development Planning Agency Provincial Parliament Governor / Head of 1st level Local Government (DPRD) **Development Coordinating Meeting** (Musyawarah Pembangunan or Rakorbang Tk. I) Secretariat of Governor 1st level Local Province level Central Regional Developmment (SETWILDA) Planning Agency Government's Divisions Department Branches (Bappeda Tk. 1) (Dinas Tk. 1) (Kanwil)

Chart.3 Province level Development Policy Planning Structure

(3) Functional Coordination of Local Development Programs Presidential Instructions for Rural Development

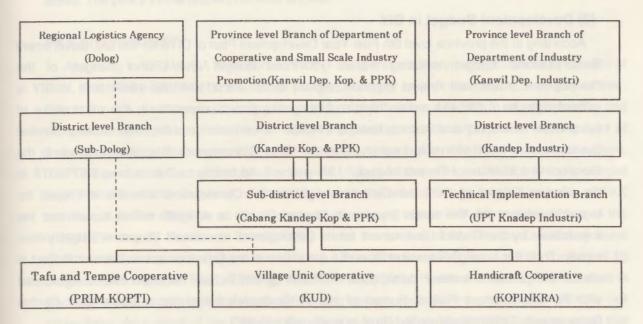
Besides local public administration line, the Director-General of Rural Community Development (Ditjen PMD), Department of Home Affairs, has the responsibility of functional coordination of nation wide rural community development projects (including IDT program and PKK program). On the other hand, local

development projects above village level projects are controlled by the Director-General of Local Development(Ditjen PD), Department of Home Affairs. For example, concerning Presidential Instructions(Inpres) for Rural Development, the Director-General of Rural Community Development is responsible for the coordination of Presidential Instructions concerning assistance for Village Development (including assistance for PKK programs) and Presidential Instructions for Less-developed Villages(IDT). In addition the Director-General of Local Development has responsibility to coordinate Presidential Instructions concerning assistance for District Development (Market, Road, School, Health, Greening and so on).

Monitoring of Cooperatives

Concerning cooperative promotion policy, the Department of Cooperatives and Small Enterprise Promotion is responsible for the coordination of cooperatives and small scale industry policies. All cooperatives (KUD, PRIM KOPTI, KOPINKRA etc.) must send Annual Reports(including Cooperative's account) to the Branch Office of the Department of Cooperatives and Small Scale Industries Promotion to be monitored (Chart.4).

Chart.4 Relation between Cooperatives and Public Administration



According to our interviews, cooperatives have no obligation to send Annual Reports to Subdistrict Offices(local public administration line). Here, we can see the priority of the Department line public administration over the local government.

According to our interview, KOPINKRA(Handicraft Cooperative) also send Annual Reports to the Department of Industry because of the Technical Support from its Branch Office (In DIY, the branch offices of the Department of Industry and the Department of Trade have not yet been integrated). PRIM KOPTI (Primary level Tafu and Tempe Cooperative) also send Annual Reports to

Bulog(National Logistics Agency) because of the soybean supply from Sub-Dolog(District Branch Office of Bulog). But in DIY, PRIM KOPTI send Annual Reports directly to Dolog DIY because of the small size of the province (There are no Sub-Dologs in DIY).

2-3 Development Administration in DIY

(1) Public Administration in DIY

The status of Yogyakarta Special Province(DIY) is the 1st level Local Autonomy(DATI I). In DIY, there are about 44000 DIY Government civil servants and about 55000 national civil servants(without officials of District and Sub-district and personnel of Armed Forces) compared with about 3 million population in DIY. Under the Governor, there are his Secretariat(Setwilda), 14 Dinas, 18 Kanwil and 15 Badan(agency) in DIY. Regional Development Planning Agency(Bappeda Tk. I) of DIY, under the Head and Deputy Head, has a Secretariat and 5 departments: Research, Economy, Social Culture, Physical/Infrastructure and Statistics/Reporting. There are about 2200 officials in Bappeda DIY and no national servants from Bappenas. A District Development Planning Authority(Bappeda Tk. II) in Sleman District has a Secretariat and 3 departments: Reporting, Economy/Culture and Physical/Infrastructure. There are about 60 officials here.

(2) Development Budget in DIY

According to the province level 6th Five-Year Development Plan of DIY(REPELITA), Government Sector(National Budget including Inpres, Provincial Budget and District Budget) of the Development Investment Project expenditure(plan) for 5 years(1994/1995-1989/1999) in DIY is estimated to be 1,582,434 million rupiah. Among this project expenditure, the expenditure of Local Government(DIY and Districts level) is 211,935 million rupiah and the expenditure of Central Government is 1,370,499 million rupiah. Thus the Local Government's ratio of expenditure in the Development Investment Project is about 13.4 percent. According to District level REPELITA in the Sleman District of DIY, the Government Sector of Development Investment Project for expenditure(plan) for the same 5 years in Sleman District is 437,690 million rupiah and the expenditure by the District Government for its Development Investment Project is 84126 million rupiah. Thus the Local Government ratio of expenditure in the Development Investment Project is about 19.0 percent. However these Local REPLITA do not include the expenditures associated with the Development Project Budget of Kanwil/Kandep(except of Inpres) from their Central Government's Departments, so the Ratio in reality will be less.

(3) Local Development Programs in DIY

IDT Program in DIY

According to GUEYE's report into the operations of the IDT(Presidential Instruction for Lessdeveloped Villages) program, the Indonesian Government started the IDT program in 1993 as a special program aimed at intensifying efforts towards poverty alleviation in less-developed villages in addition to the Presidential Instruction for Villages (Inpres Desa) that in itself had contributed to achieving poverty reduction from 60% of the total population in 1970 to 23.6% in 1993.

The IDT program aims to empower those involved in economic activities by channeling funds from the State Budget through the Indonesia People's Bank (BRI) to the poor people identified as lessdeveloped villages. Targeted people are expected to organize themselves into small groups made of twenty to thirty people and make economically sound activity proposals, which are then financed through an IDT program fund. At present the IDT villages are 127 among 438 villages in DIY (28.9 percent). The effectiveness of this policy is measured by the decrease in the number of people identified as poor prior to the development of income rising activities undertaken by the poor people through IDT program; the increase of family income and welfare and starting capital accumulation by the community group. Although the income of the targeted groups has increased, they still remain far from the objective of self-reliance. Probably the most important impact of IDT program could be attributed to the building of self-confidence and self-esteem of the poor people which can give rise and sustain a sprit of initiative and entrepreneurship in less-developed villages. In this respect, the IDT program has made important steps towards the eradication of weak motivation, risk-aversion and other situations that basically typify the condition of poor people. Lastly, there are many people living below ther poverty line in non-IDT villages in rural and urban areas. The policy in this respect remains unclear.

PKK program in DIY

According to KITAMURA K's report on PKK (Family Welfare Movement), the focus of the idea of PKK, is to centre attention on the role of women, who play an important role as wife and mother. Due to the role of women in educating their children and their responsibility in raising a healthy and prosperous family, the improvement of women's education must be important for development of Indonesian society. The organization of PKK is characterized as a nationwide hierarchical system. The Chairperson at the national level is the wife of the Minister of Home Affairs, at the provincial level, the wife of the Governor, at the village level, the wife of village head. The basis of PKK activities is in the village or at the equivalent urban level, where PKK forms one section of the Village Community Resilience Board(LKMD) under the control of the Director-General of Rural Community Development, Department of Home Affairs. The Basic Programs of PKK consists of 10 programs, for example, Food, Clothing, Education/Craft Skills, Health and so on. PKK activities in each level are implemented through 4 working groups, but the membership of PKK is not compulsory. As a result of the PKK program for non-formal education in 1971 it was reported that approximately 42.2% of all Indonesian women were illiterate falling to 26.1% in 1980. As for health, PKK activities have had much success in the area of Family Planning (KB) and in declining maternal mortality rates as well as infant mortality rates much in part to the establishment of a POSYANDU(Health Center) in every village under the PKK program. However, some weakness in the PKK program could be identified in the fact that since the PKK framework of activities was limited to 10 basic programs, they do not consider the evolution of women's role in society. Therefore, it might be difficult to integrate the new aspirations of economically and socially active women within the PKK program.

Cooperatives in DIY

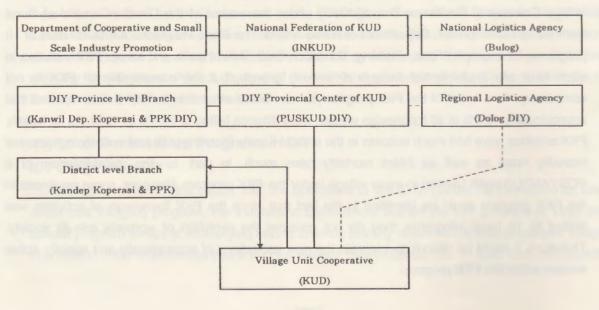
According to ARAKAWA's report of KUD(Village Unit Cooperative), in Indonesia, the cooperative concept is a necessary component of national development policy. Basically, the Government's systematic strategy for cooperative development is to establish autonomous cooperative organizations from the village level to national level through the provincial level, in order to help members to function effectivity.

KUD was organized at the Sub-district(Kecamatan) level and has a Provincial Center (PUSKUD) and National Federation(INKUD). The Government has promoted KUD as the core organization for economic activities of farmers and rural people. For promoting KUD activities, the government prepared 5 main operational programs:

- 1)Promote Coop business activities,
- 2)Provides special soft loans, such as petty trade credit (KCK) and the small scale investment credit(KIK),
- 3) saving and capital formation,
- 4)Enhance the organizational and managerial competence of the Department of Cooperative and Small Scale Enterprise Promotion,
- 5)Promotiion of Coop business networking.

Eventually, KUD membership increased rapidly: from 2316 in 1973 to 9200 in 1995 throughout the nation and from 5 groups in 1973 to 60 in 1995 in DIY. There is 1 PUSKUD in DIY. According to our interview with a KUD member of staff, currently KUD does not send an Annual Report to Dolog DIY(Chart.5), though in the 1970s KUD had an extremely close relation with Dolog in "Green Revolution" policy implementation. In 1984, Indonesia achieved rice-sufficiency; one of the most important issues since independence in 1945. And as there are some fishery KUD, KUD is not exclusively an organisation for Agricultural Cooperatives, but rather Village Unit Cooperative by definition.

Chart.5 KUD Monitoring / Reporting Structure in DIY



Currently there are a variety of non-KUD cooperatives in Indonesia, such as the Handicraft Cooperative (KOPINKRA) or Tafu and Tempe Cooperative (PRIM KOPTI). There are 5 PRIM KOPTI and 30 KOPINKRA in DIY. These facts suggest that the Indonesia's cooperative policy changed from "rice self-sufficiency" to "diversified economic development," adapting the change in public administration agenda in coordination with Indonesia's changing development situation. In fact, all cooperatives that WG-4a visited in DIY stressed that "a cooperative is an economic enterprise, and thus not appropriate for Governmental implementation".

2-4 Problems and Recommendations

(1) Evaluation of Local Autonomy

In Indonesia, the local development policy coordinating structure is well developed. On the other hand, the Indonesian Government started the pilot project to give Local Autonomy(DATIII) also to a Sub-district level(the Kecamatan Pakem WG-4a visited was one such project). But it appears that some elements of the coordinating system do not work well. An example is the relation between the Central and Local Government in terms of the development project budget. According to our interview with a high-ranking official of the DIY Government, the Province level Development Project Budget is composed of the formal Provincial Government Budget and the Central Government Budget to Local Branch Offices in DIY. The ratio of these budgets is about 60 percent from the Provincial Government Budget and 40 percent from the Central Government Budget. According to the REPELITADA of DIY however, the expenditure of Local Government (DIY and District level) for Development Investment Project is only 13.4 percent among all the DIY's Development Investment Projects. This suggests that the Governor, as well as a high officials of DIY Government who assist the Governor, have the difficult job of assessing and auditing all development projects in his province DIY. Thus it is necessary to empower the system of assisting the Governor, who has the responsibility of coordinating and monitoring all development activities as Head of Local Government and also Head of all Kanwils in his province. The Governor needs access to more information.

(2) Limitation of IDT Program

Although the IDT program appears to achieves its objectives successfully, there are 2 limitations. First is in the key area of sustainability. An IDT Village in DIY that WG-4 visited, operates a goat husbandry project which appears very successful as villagers now keep an average of 5 goats. But there is a problem that the goat husband project has reached its maximum sustainable size; especially in terms of bate and equipment. If the project is scaled-up as a business, increasing to a average of, say, more than 10 goats, it is difficult to obtain bate and the capital required to finance and utilise equipment effectively. Although this is beyond the original objectives of the IDT program and villagers should step up operations by gaining access to small scale credit, such as KIK or KUK(bank's credit for small scale industry) etc., all require levels of collateral that are too high for most people in the village.

Second is the problem of the poverty criteria in the IDT program. Although the poverty line defined by Indonesian Government is at a consumption level of less than 3.5 kg rice/person/month, the people above the poverty line in IDT villages, and below and above the poverty line in non-IDT villages, also needs capital and technical support from the Indonesian Government. At this post-IDT program stage, it could be more effective for Government to cooperate with Development NGOs more than it has done previously.

(3) Significance of Promoting Cooperatives

An Indonesian economist pointed out that it is difficult for cooperatives or small businesses in Indonesia to be competitive. The social importance of cooperatives or small businesses promotion is very significant as a key to a more balanced income distribution. Cooperatives are thus expected to act as an 'ace card' to realize balanced development among regions, sectors and social classes. The most important point is access to capital(modal) for starting small scale businesses. Therefore, it is recommended that new criteria are prepared for the very small credit below the KUK credit targeting not only the poor, but also those marginally above the poverty line.

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3. NGOs in Indonesia and Democratic Development

-Their Activities with Justice-

3-1 INTRODUCTION

While it is true that official development policies have been partly successful, poverty situations still exist. Indonesia remains faced with unfair development policies and an unethical distribution system caused by an authoritarian government. Although the government and NGOs have tried to alleviate poverty, their approaches have been different. Many NGOs search for an alternative development policy to minimize these income disparities.

3-2 HISTORY AND CHARACTERISTICS OF NGOs

In the late 1960s, community based NGOs emerged in order to promote "grass-roots" development In the 1980s, advocacy NGOs emerged in order to reform an 'unfair' world economic structure into a "New Order" society. Currently NGOs in Indonesia are categorized into two types: COMMUNITY BASED NGOs and ADVOCACY NGOs. Both approaches are important to achieving the improved living conditions of economically and socially disadvantaged people.

There is no reliable information on the number of NGOs in this country. During our research, three sources were consulted that provided information on the operation of NGOs.. According to the Department of Home Affairs (Departemen Dalam Negeri) 30,000 NGOs exist, but a professor of Gadjah Mada University stated that this was an exageration and asserted that it should be about 6,000 NGOs. On the other hand, BINA SWADAYA, which is one of the biggest NGOs in Indonesia, acknowledged that there were 10,000 NGOs in this country. The reasons of this ambiguity are; a lack of comprehensive forum in Indonesia, government perspective toward NGOs as problematic social groups, ineffectiveness of the Department of Home Affairs registration process, and a wide rage of interpretations as to what an NGO is. The definition of an NGO is not simple in Indonesia. There are numerous semi-governmental agencies and Government-initiated or cooperatives are included in GONGO (Government Organized NGO. PKK, KUD and other cooperatives are included in GONGO. However, since these organizations are included in the study of WG-4a, our research has not include them. In addition there are many religious organizations categorized as NGOs (they too are not included in our report).

3-3 LEGAL AND POLITICAL SITUATIONS

In spite of the world trend that has accelerated grass-root approaches, Indonesian NGOs are confronted by governmental pressure on their activities. Since 1971 when the Department of Home Affairs took the responsibility for community development, NGOs must register to be admitted officially. In addition they need the tacit approval of provincial or district authorities beforehand. "The 1973 Regulations Governing Overseas Technical Co-operation and Assistance" and "1985 law on Social Organization" (Undang-Undang Organisasi Kemasyaratan -ORMAS) are assumed to undermine the autonomy of NGOs. Government does not deny the need for NGOs themselves, nor the importance of co-operation, but they are suspicious if some of NGOs try to instigate people against the government. According to "the Instruction to Provincial and District Authorities" issued in 1990 by the Minister for Home Affairs (MENDAGRI , 1990), the status of NGOs is as a friend (mitra) of the government, and the role of NGOs is in assisting people's participation and self reliance. But, ADVOCACY NGOs suspected by the government were often suppressed. Government prefers to use the term LSM(Lembaga Swadaya Masyarakat; Institute for Developing Community and Self-reliance). On the ther had, many advocacy activists use the term ORNOP (Organiasi Non-Pemerintah; Non-Governmental Organization). It implies NGO activity in poltically troublesome areas.

3-4 FUND OF NGOs

NGO funds derived from member fees, profit from fund raising activities like publication, individual donation, government subsidy, international organizations, and foreign NGOs. However, almost all of the NGOs are short of funds. In addition to the shortage, the common problem is that their funds come mostly from donations from overseas NGOs (e.g. OXFAM, NOVIB, Asian American Foundation). This situation is not sustainable because the decisions of donors limit NGOs' autonomy.

3-5 ACTIVITIES OF COMMUNITY BASED NGOs

Community based NGOs act directly with communities to raise the living standard of socioeconomically disadvantaged people. They contribute to the capacity building of community
members, skill building of workers, and market access of members' products. Capacity building is
considered as the first step toward self-reliance. Activities at this level are expected to give each
community member self-assurance and show them how to organize themselves. NGOs disperse
information at various levels and train community leaders. YAYASAN PRAKARSA has experience
at this level. Skill building programs are carried out by YAYASAN MITRA TANI, instructing safe
farming through "Farmer to Farmer Field School." APIKRI provides not only skill building assistance
with craftsmen but also in locating domestic and foreign markets. Foreign markets are introduced
by overseas NGOs. These NGOs are categorized into two types. One is BINGO (Big NGO) and the
other is LINGO(Little NGO). The aims of both types are not much different, but there are
differences in implementation processes. BINGOs have many staff and are well organized,
enabling them to provide comprehensive development programs. BINA SWADAYA is a well known

NGO of this type. BINA SWADAYA has various programs from capacity building to credit programs for individuals. Also, BINGOs usually have a close relationship with government. They participate in the decision-making process of official development programs and provide consultation on a variety of projects. In contrast, the number of staff and funds are limited for LINGO. LINGOs' activities are rather partial and small scale. However, since they are familiar with people and place in the areas where they are operating, they are generally able to meet the concrete needs of the areas, and assist people in developing appropriate development strategies. Shortage of funds is a serious problem for most NGOs and low salaries make it difficult to hire qualified staff.

6. ACTIVITIES OF ACVOCACY NGOs

Advocacy NGOs like LBH (Lembaga Bantuan Hukum) and WALHI(Wahana Lingkungan Hidup Indonesia-Indonesian Environment Network) support alternative development policies based upon democracy, human rights, environmental protection and civil society. These NGOs are important for social justice because governmental development policy maintains structurally unfair conditions. Their relationship with government is not good. The Indonesian government often regulates the activities of advocacy NGOs. For example, government has requested both International NGOs and the countries that have relationships with Indonesian NGOs to stop financial aid for NGOs in order to weaken their activities. Most typical advocacy NGOs are WALHI, dealing with environmental problems, YLKI (Indonesian Consumer's Organization) for protection for consumers' rights, LP3ES(Institute for Economic and Social Research, Education and Information), promoting information services, research and education, and LBH, promoting human rights, democracy, and rule of law (legal society). Networking processes are important concepts for NGOs to promote empowerment and strengthen their capacity since network facilitates, information exchange, foreign assistance, and negotiation processes are controlled by government. In general, two types of networking exist. One is regional networking, and the other is international networking. For example, there are five regional forums; Yogyakarta, North Sumatra, Central Java, West Java and Surabaya. INFID (International NGO Forum on Indonesian Development) is an international forum and cooperates with INFID, the Hague Secretariat and Japan NGO Network on Indonesia (JANNI). Many NGOs attempt to realize global solidarity and to act for a democratic society as well as for fair development. Networking is also indispensable for cooperation between Community Based NGOs and Advocacy NGOs.

7. CONCLUSIONS

- Overall, NGOs in Indonesia are more active than premised prior to undertaking this research.
 Their activities compensate for national development projects.
- Some proposals of NGOs are too drastic for government to accept. Conflicts between government and NGOs are unprofitable for both sides. Government should conduct constructive dialogue with all NGOs, including those opposed to their policies, and discuss problems.
- For relieving funding problems, more assistance from overseas is necessary. However, alternative funding sources within Indonesia should be sought.

- Community Based NGOs are effective in raising the living standard of disadvantaged people at the grass roots level, but at present, the activities of NGOs and KUDs partly overlap. It is important to avoid duplication, the removal of which would make community development more effective.
- Some NGOs, in particular Advocacy NGOs, search for alternative development based upon democracy, human rights, social justice and fair distribution.
- NGOs attempt to reduce regional and income disparities in Indonesia.
- NGOs oppose some regulations that they perceive as being against international human rights and freedom of speech.

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Working Group 5

Local Culture

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Local Culture

1. INTRODUCTION

Working group 5 visited the Ministry of Information and two private TV stations (SCTV and RCTI) to get information about broadcasting conditions and government policy for villages in Jakarta.

In order to find out how widely or deeply their policy permeates into villages, we chose two villages in the prefecture of Bantul in which to conduct our interviews. These two locations were chosen from among the five villages that were researched by our intersectoral groups as practical preparation for us. One was Sarirejo, Singosaren, which is located in the Banguntapan sub-district near Yogyakarta, and the other was Purwarejo, Wonolelo, located in the Pleret sub-district, and a bit further from Yogyakarta. Both villages have been designated by the President as "Inpres Desa Tertinggal," meaning that they are placed in a category of "least developed villages." In addition, we home-stayed with urban families so that we could enhance our research with first-hand experience in a local family setting.

Our research investigated various aspects of communication. Using our questionnaire as a base, we interviewed respondents directly in Indonesian or Javanese with the help of interpreters about their daily communication patterns. Questions covered such things as general communication, meetings, newspapers, magazines, TV, radio, and knowledge of Japan. As we conducted our research, we were able to observe their communication patterns and to perceive their strong community ties.

We conducted our interviews in Sarirejo with villagers who were between 25 and 45 years of age because we believed that they played the most active role in the village. We also realized that many villagers were from outside areas. This indicates that they would have a fair amount of knowledge about news from outside the village.

After our research there, we noticed two major problems in our research process: because we did not limit our interviews there to one RT, we were not able to cover all households on one residential area, and because we limited the age group to between 25 and 45, we could not make a

comparison between generations. Taking these points into consideration, we decided to limit our interviews in Purworejo to residents of a single neighborhood Association, RT 4, RW 14. We conducted interviews with 41 villagers. Most of them were born in the same village, Wonolelo. Since we limited our respondents to a smaller group, we were able to cover all households. We interviewed either the head of the household or his spouse. We also got additional information from some of the youth of the villages. This time, we felt that an accurate picture of the conditions of communications would be with in our grasp.

Let us begin by sketching out these two places. Sarirejo is located 7 km southwest of Yogyakarta. Since it is located near the city, they can easily contact people outside the village. There is a central road called the Ring Road. Even though it separates the northern part of the village from the southern part, it functions as a link between the villagers and the outside world. In addition, the land is inexpensive to buy, so it serves as a practical residence for commuters to Yogyakarta. However, we did not interview those who were from outside, and chose to focus on insiders. Their main products are rice, vegetables, cassava, and livestock. In addition, they have some cottage industries such as silversmiths, tailors and the production of "emping." Cars, motorbikes and bicycles are their means of transportation. As for mass communication, there are TV, radio, newspapers and magazines. For general communication in their area, they have telephones, Mesjid and Mushola, which are Mosque sound systems, and several notice boards. For local communication they also use letters of invitation and word of mouth.

Purworejo is located 19 km southwest of Yogyakarta. It is bordered by hills on one end of the village. It has a population of 135, comprised of 30 households. A proper bridge leading to the outside was completed in 1990. Therefore, they can commute by car or motorbike. Their main products are rice during the rainy season and tobacco during the dry season, along with vegetables and livestock. Each villager has their own land, even if it is a very small plot. They have no irrigation system there, and use several wells scattered in the fields for watering. Therefore water shortage is a serious problem for them and we talked about this with the hamlet leader of Purworejo. An additional income generating activity is the sale of charcoal and firewood. Many people are known as "serabutan," meaning that they depend on seasonal temporary jobs such as construction, agriculture, lumber-jacking and "becak" driving. We were also able to get in touch with a couple of villagers who had recently returned from Saudi Arabia where they had worked as servants. There were also a few villagers who had been to Hong Kong. The cottage industries in Purworejo are the making of ring cakes, "emping" and furniture. This village has had electricity since 1993. The main transportation means there are bicycles, followed by motorbikes and a few cars. It takes about two hours to commute to Yogyakarta by bicycle. As for mass communication, they have TV, radio, newspapers and magazines. For general communication, there is no telephone line, although one person in another RT has a cellular phone with international calling capability. The village head has a walky-talky at his own place for receiving orders from the local government and for communication with other village heads. The village has Mesjid and Musala (the Mosque sound system) and some notice boards. They also often use letters of invitation and old-fashioned word of mouth for local messages.

2. General Communication within the "Desa"

We would like to describe the means and ways of communicating within the villages. In these two villages, the mosque sound system plays an important role in communication. This is supplemented by the use of "undangan", which is a letter of invitation. The villagers also seem to have close mutual communication orally. Through the "mesjid", or mosque loudspeaker, they receive announcements in the following instances: a death, for "pengajian" (which is an Islamic study meeting,) for "kerjabakti" (which is for volunteer activities such as cleaning up roads,) for infant health checks, for special events, for personal emergencies (an example in Wonolelo was that during a husband's absence, his wife gave birth), for informal meetings and for sudden changes in meeting schedules. These announcements are also made by a truck equipped with a loudspeaker. In Singosaren, they also get reconfirmation of formal meetings by loudspeaker. "Undangan" are used for special meetings such as job-training or wedding parties. These are distributed to each household.

Oral communication is the most important means of communication for the villagers. Although official information is distributed to hamlet leaders and village heads through written materials, every member of the community gets details through the Mesjid speakers, or at RT meetings.

We would like to explain about each meeting. There are 7 regular meetings:

- The RT ("Rukun Tetangga") meeting, attend by the head of each household, is held once a month in the evening from 9-11 with about 20 in attendance. They discuss social, religious, educational and cultural matters.
- The "Klompencapil" attended by the reader's group, listener's group and viewer's group, is a discussion on the special agricultural programs on television, radio and newspapers. It is held on Wednesday once every 35 days, which are counted by the Javanese calendar.
- The IDT meeting is held once a month to talk about the use of government grants and has an attendance of about 40.
- PKK (family welfare movement), attended by the mother of each household, is held on Sunday, once every 35 days from 2 to 4pm, with about 60 members. They receive knowledge about life improvement in the village through this activity. These activities include delivery of promotive and preventive health and family planning services through "Village integrated service posts", known as Posyandu. For example, volunteers called Cadres in the village try to allay the fears of mothers and infants who have no idea about immunization, and they also distribute the pill or condoms for prevention against pregnancy. They play an important role in promoting PKK activities.

In most developed countries, education has been revised so as to offer the same general scholastic content to both females and males. In Indonesia, however, female informal education called PKK has been emphasized. The PKK program was started as "Family Westare Education" in Bogor, West Jawa by the Department of Health in 1957, then set up in Central Java in 1967.

Through "Family Welfare Development" and "Family Welfare Movement," it was restructured by the Ministry of Home Affairs in 1984. It has several levels: national, provincial, regional, district, village or city, hamlet, RW, RT and Dasawisma, which is the smallest unit. The annual grant from the government is one million Rupia for each village. It has ten activities prepared by the Ministry of Home Affairs:

- 1. Comprehension and practical application of "Pancasila" -a religious motivation.
- 2. Mutual cooperative -working together in a traditional way.
- 3. Food
- 4. Clothing
- 5. Housing and home economics
- 6. Education and craft skills -informal education
- 7. Health -KB(family planning)
- 8. Development of cooperatives
- 9. Protection and conservation of the environment
- 10. Appropriate domestic planning

This program is designed to improve female welfare and education. Though great steps have been made toward increasing female knowledge, the fact is that it is not aimed at women's evolving roles in society, meaning that the most emphasized roles are limited to only those in the home, especially at the village level. It may also be a result of information control. A basic policy for the greater diversity of female roles in society has not yet been made a priority by political leaders. It seems that natural sex, not social gender, is still maintained.

Desa Wisma is divided into 10 households, which is the smallest PKK unit. They give a flower's name to each group, such as "Anggrek" and "Mawar". The meetings are held in the evening from 8 to 10, and the frequency is decided by each group. There are also several Islamic study meetings such as "Yasinan", held once a week, "Amaliah", held three times a month, and "Berjanji", held once a week. We have observed that they have numerous religious meetings and that most meetings are held rather late in the evening because of their daily work schedules and family obligations. We have also noticed that they have nation-wide PKK activities and these meetings are well-organized; PKK central government that of province, prefecture, sub-district, village, hamlet and Dasawisma, so that every single person can get detailed information.

In terms of communication between villagers and their friends or relatives outside the village (other than Yogyakarta), they usually communicate by letter. However in Singosaren, because they have a Wartel facility and public phones nearby, they often use the telephone to contact people outside the village, including Yogyakarta. The close proximity of Singosaren to Yogyakarta also makes it easy for them to go and see their relatives or friends. In Wonolelo the nearest Wartel and public phones are in Pleret which is several kilometers away. Still, some residents of Wonolelo do use Wartel and public phones. In emergency cases such as fire, each RT has a "gerduronda" which

is a traditional alarm system made of metal and a wooden bar. For personal emergencies such as illness, they ask someone who has a car to help them.

3. Newspapers and Magazines

Here we would like to present our findings on the press situation in Indonesia, with particular focus on the villages where we conducted our research. First, we should look at Indonesia as a whole, and then at governmental activities in the villages.

In Indonesia, there are many organizations and groups with potential to be used as tools for the development of information activities. "Kelompencapir" (the radio listeners, newspaper readers and television viewers group) and "Pesantren (Islamic boarding schools) Information Centers" are two examples. (p,245 INDONESIA 1996 An Official Hand Book, Department of Information Directorate of Foreign Information Services)

The government also launched two projects in rural areas. One, called SKUD (newspapers for villages), was started in 1977. In this project, the government chose 5 appropriate newspapers to be delivered to villages. The other, called KMD (newspapers to develop villages), was started in 1979. The government gives grants to the newspapers to publish the newspapers for especially villages.

Based on the KMD program, in 1979, there were 34 publishers with a total circulation of 9,775,000 copies distributed in 13 provinces, while in 1994/95 it increased to 58 publishers with a total circulation of 125,064 copies per day. (p,246 INDONESIA 1996 An Official Hand Book)

During our stay, we were fortunate enough to be able to interview the staff of the "Kedauratan Rakyat" newspaper. According to the marketing manager, the KR also publishes a Javanese newspaper called "Kandha Raharja" (only 100 rupia per copy). This newspaper was started as part of the KMD project in 1982, with 25% of the cost covered by a governmental grant. In the beginning, they only published about 1,000 copies. Today that number has grown to 10,000 copies, although it is still not enough to meet the demand. Because this newspaper is aimed at the development of rural areas, the articles are mostly about agriculture and related events such as Mt.Merapi's volcanic activity, with occasional "gossip" about singers, artists, etc.

At the present time, all newspapers are required to publish newspapers or magazines expressly for the development of rural areas. The "Bernas" newspaper, for example, also publishes "Jokolodang", a Javanese magazine.

Next, we would like to report on the situations in the two villages where our group researched.

Figure 1: Percentage of people who read newspapers

	Way	Wonolelo, Dusun Purworejo RT 04 RW14	Singosaren, Dusun Sarirejo III
	of obtaining	(40 interviewees)	(19 interviewees)
	1) Regular subscription	2.5%	15.8 %
	2) At notice board	20.0%	26.3%
People who	3) Borrow	20.0%	26.3%
read	4) Buy at store	5.0%	5.3%
	5) Other means	5.0%	5.3%
People who do not read at all		47.5%	21.0%
Total		100.0%	100.0%

The various means of obtaining newspapers and magazines are as follows:

● Regular subscription - 2.5% in Purworejo, 15.8% in Sarirejo III.

In both Purworejo and Sarirejo III, it is possible to have a subscription.

In Purworejo, there is an agency which delivers newspapers, magazines and books.

Notice board - 20.0% in Purworejo, 26.3% in Sarirejo III.

Each village has notice boards where they post the newspaper either daily or weekly.

In Purworejo, the "Minggu Pagi", or Sunday edition is posted and this responsibility is under the charge of a member of the youth group. In Sarirejo III, they post the Kedaulatan Rakyat. In both villages all pages are available.

Borrow -5.0% in Purworejo, 5.3% in Sarirejo III.

Some answered that they read at a friend's or neighbor's house. Schools also have subscriptions for newspapers so teachers and students can read them at school. And some offices, too.

Buy at stores - 5.0% in Purworejo, 5.3% in Sarirejo III.

As mentioned before, there is one agency in Purworejo. There is also one bookstore in Sarirejo III but newspapers are not available there, so those who answered that they buy the paper at a store mostly get newspapers when they go out of the village.

Others - 5.0% in Purworejo, 5.3% in Sarirejo III.

In Purworejo, one person answered that he read newspapers that were used as wrapping. Another replied that he read the paper at Kelompencapir meetings.

Here, we'd like to explain further the "Kelompencapir", or "the radio listeners, newspaper readers and TV viewers group". Like the translation in English, the members can be separated into three

groups. This was started in 1968 as a radio listeners group for the beginning to encourage villagers to talk about their own problems such as daily problems including agricultural improvement. This program has included two more functions, readers for the papers and viewers for TV since 1983. Every year they have a contest and the best of the best would be invited to Jakarta and given a prize.

According to the head and the secretary of Kelompencapir in Purworejo, which has been awarded third prize in the Bantul province, there is a Kelompencapir in each village.

As for Wonolelo village, the Kelompencapir was established in 1983. (Though one of the members said 1984. Unfortunately, we were unable to get official data.)

In the newspaper readers group, they read not only newspapers such as "Kandha Raharjo" but also magazines like "Jokolodang", and bulletins. They pick out useful topics from these sources for the village to discuss.

The newspaper "Kandha Raharjo" is sometimes distributed by the Inforation office of Kecamatan. The Javanese magazine "Jokolodang" is also distributed every month.

We also inquired about the educational backgrounds of the respondents in the two research sites. Although the samples were not numerous enough to determine a definite trend, we were able to make some generalizations.

Figure 2

Educational	Purworejo		Sarirejo III	
background	Read	Do not read	Read	Do not read
Non	0	0	0	0
Some elementary	0	42.1	12.5	0
Elementary	25.0	36.7	12.5	100.0
Junior high	0	5.3	25.0	0
Senior high	75.0	5.3	31.3	0
College level	0	5.3	18.7	0
Others, not sure	0	5.3	0	0
Total	100.0	100.0	100.0	100.0

Generally, people who do not read newspapers at all are educated only as far as the elementary school level. In Sarirejo, all of the people who do not read newspapers at all had only graduated from elementary school. Perhaps this is related not only to their educational background but also their socio-economic situation.

As for magazines, 40.0% of the respondents in Purworejo read magazines. The most popular one is "Jokolodang", a weekly Javanese magazine. "WARTA", a monthly magazine, and "BAKTI", a religious magazine are also read. In Sarirejo 47.4% of the respondents read magazines such as "Jokolodang" and "Kartini".

As we researched what kind of newspapers they read in the villages, we found that Javanese newspapers or magazines are popular despite the small number in circulation. Even a young girl who is going to college may be good at Indonesian answered that she sometimes read a Javanese newspaper. In urban areas, however, the situation is different: some young people speak little Javanese or no Javanese.

We hope to be able to get to know the situation at a micro level and to understand those tendencies more clearly in the coming year of OFW.

4. Television

The Department of Information of Indonesia introduced the first television station in this country in 1962. Known as TVRI, it is a state-owned operation which to this day is under the supervision of the Department of Information. 1989 saw the beginning of private television with the establishment of RCTI. There are presently five private stations operating and our research group was able to have meetings with the directors of RCTI and SCTV, which are the #1 and #2 stations respectively in terms of size and coverage nationwide. In these interviews we discovered that at present there is no formal broadcasting law. This is evidently a source of some anxiety in the sense that legal "do's" and "don'ts" are not yet clear. Deliberations are pending on a broadcasting law that is being negotiated by the Indonesian government and representatives from the television stations. Apparently, the law will be a welcome clarification for everyone.

While revenues for private television largely come from advertising, the public station TVRI does not air commercials and so does not have this source of income. They do, however, collect monthly fees from viewers which are 5,000 Rupia per month for color televisions and 2,000 Rupia per month for black and white. Reportedly, all private television stations are required to pay 12.5% of their profits to TVRI, and to air the government-produced and distributed news broadcasts. Private stations are prohibited from producing their own news broadcasts but are permitted to produce and air their own "information" programs. This causes considerable semantic discussion on the definitions of "news" and "information". At present, because of the ambiguity of TV regulations, these information programs generally exclude politically charged issues and tend to emphasize crime, economy and human interest stories. By being careful not to offend the authorities, television stations can avoid the risk of losing their broadcasting licenses. In spite of this risk, however, we found out that there are several talk shows that do deal with some controversial

issues. In fact, an executive at RCTI told us about being personally banned from hosting the talk show "Our Focus" because of having offended the government with his discussions.

In addition to the governmental sensitivities, we were also told about the complex cultural sensitivities in Indonesia. We all learned about the wide range of cultures in this country from our lectures with the professors of Gajdah Mada University and so perhaps can imagine some of the difficulties that would arise in television programming. We were told about an incident at SCTV that caused the resignation of one of their executives: a cooking show was allowed to continue its run through the fasting month observed by Moslems and caused quite an uproar.

The executive whom we interviewed at SCTV had come to Indonesia six months ago from Hong Kong and we were curious to hear how television in Indonesia compares to that of Hong Kong. She reported finding television to be considerably more competitive here than in Hong Kong, and said that while the work pace in Indonesia is less hectic that in Hong Kong, it is much more crucial to stay on top of ratings and to respond quickly to fluctuations. This is because companies who advertise are very quick to switch stations when ratings go down.

When we asked more specifically about programming, we found out that Indonesian private stations are continually increasing the percentage of broadcasts of Indonesian-made productions, although at present the majority are still imported. (i.e. since their beginning in 1989, RCTI has gone from 95% imported programs and 5% domestic, to 60% imported and 40% domestic.) They have also succeeded in diversifying their foreign programs so that a higher percentage come from countries besides the US.

Figure 3

	RCTI
first	private television station established in Indonesia
	Founded in 1989
	Initially 95%of its programs were imported
	and only 5% were produced domestically
	1996
	60% imported
	40% domestic
	RCTI goal
	20% imported
	80% domestic

Both RCTI and SCTV reported that about 5% of their programs are from Japan. We also heard that Japanese dramas are well received in Indonesia because of similar morals and family values (as opposed to "western"). One example from our interviews in the villages is that we found many people who had seen all or part of "Oshin" and had liked it very much. We also found many animated and live children's shows from Japan to be popular among the youth. According to those we interviewed at RCTI and SCTV, Japanese marketing in television is quite aggressive and the programs generally have reasonable and competitive prices.

In our interviews in the villages, we found television to have a significant role in the daily routine of many people. Of those who do not have their own, nearly everyone reported that they sometimes watch television at a relative's or neighbor's home. We found out that there are information programs on the national and international level, as well as numerous foreign programs being broadcast in the villages we visited. Popular domestic programs include national and world news broadcasts, traditional Javanese dramas called "Ketoprak", an Indonesian music program called "Untuk Segelanya", and educational programs on village life. Some examples of these educational programs are "Siaram Pedasaan" on farming and home industries, and "Mbangun Desa", a program about village life that airs informative episodes weekly as well as dramatic episodes monthly. Popular foreign programs include movies from India and Hong Kong, telenovellas from South America and cartoons from Japan. We observed, however, that in spite of the popularity of foreign programs, viewers are not always explicitly aware of the country of origin of the programs they watch.

The two locations where we conducted interviews were dramatically different from each other in terms of affluence and accessibility. These factors are reflected in the data collected: the saturation levels of households with televisions in each of the two are quite different. Sarirejoth is a more financially stable community. It also has the benefit of the highway that splits it down the middle making it easily accessible. In Sarirejo III the saturation level of households with televisions is 81%. Purworejo is a village that is struggling financially and it's location is quite removed. The saturation level there is only 40%. (See fig. 4)

Another trend that we found was that television owners tended to be relatively well-educated. In Sarirejo III, among owners of television sets, 82% have completed their elementary education or higher. This is also true in Purworejo with 92% of television owners having completed elementary or higher.

Figure 4

	telev	ision	
respondents who HAVE a television		respondents who do NOT HAVE a television	
Sarirejo III (hamlet)	Purworejo (RT)	Sarirejo III (hamlet)	Purworejo (RT)
81 %	40%	19 %	60 %
	Educ	ation	and the second
	little or no form	mal education	
18 %	8 %	25 %	56 %
	finished eleme	ntary or higher	
82 %	92 %	75 %	44 %
	have seen foreig	n TV programs	
94 %	100 %	100 %	22 %
	some knowledge	of national news	
94 %	100 %	100 %	61 %
	some knowledge of	international nev	ws
76 %	67 %	75 %	11 %

On the international front, we found that people with a television in their own home were more likely to watch news and programs from foreign countries than those who watch television at a neighbor's house. However, the fact that they watch television does not necessarily mean that they are aware of or at all interested in knowing about events outside their village. Some people stated directly that anything outside their immediate surroundings and daily survival needs is quite unnecessary and superfluous. We sometimes found that although the respondent might be aware that a certain program is foreign, they did not know where the program comes from and therefore were not conscious of what country's people or culture they might be viewing. The respondents with a complete elementary education or higher tended to be more aware of the outside world and more interested in finding out more. Along this same train of thought, the younger respondents, who have grown up with mandatory schooling, were noticeably more outward-looking and aware than their parents and grandparents.

5. Japanese culture in the villages of Yogyakarta

Our knowledge about Java's own culture is unfortunately too limited at this point for us to be able to fully comprehend the cross cultural influences in Yogyakarta from within Java. However, we could find some effects of foreign cultures on their lives. Here we would like to discuss the penetration of Japanese culture into the farming villages where we focused our research. Both villages are designated as poor areas by the Indonesian government.

Sarirejo is in a small village named Singosaren which has no markets, book stores or public telephones. However this village is located at a convenient distance from Yogyakarta city and many people have bicycles or motorcycles. For this reason, people get information daily, not only through mass media, but also from urban culture outside the village.

In Puruworejo, which is quite far from urban Yogyakarta, we interviewed people of different generations, and found many who had experienced the Japanese occupation period. We found that knowledge about Japan from the occupation period was more common than knowledge about current Japan. For example, two of the interviewees didn't understand what country we were talking about when they heard the word "Jepang" in Indonesian. However, once they heard "Nippon" they realized where it is. In spite of having had some contact with Japan during the occupation period, many people don't notice anything new coming from Japan, including Japanese words.

When looking for Japanese influence on the two research sites, we noticed that there are a variety of industrial products such as televisions, radios and motorcycles that are made in Japan. When asked what Japanese companies they are familiar with, Honda and Suzuki are at the top of the list. Sometimes they are so familiar with Japanese products that they are not aware of the fact that the products come from Japan. The words Honda, which is a famous maker of motorcycles, and Sanyo, which is a pump maker, are frequently used in place of the words motorcycle and pump, even though they are brand names, not the products themselves.

In Singosaren, close to the city, one cottage industry has a sewing area. They make casual dresses called "kimono", which are like "yukata" or gowns, and bring them to sell in the main shopping street, Marioboro. In urban areas some people like European clothes which are designed by Japanese, but not as many people in villages are interested.

There are many Japanese courses for students in Yogyakarta, the city of education. In big cities like Jakarta, Japanese language ability, as well as English, leads to a good job. In Yogyakarta, Japanese companies or projects are not as numerous as in Jakarta, so the Japanese language is not yet in such high demand. However we often heard Japanese words from people in the tourist industry, such as becak drivers, taxi drivers and venders at sight-seeing spots.

We also asked our respondents some general questions about Japan. Hiroshima and Nagasaki were as well-known as Tokyo because of the atomic bombings in the Second World War, which Indonesian people study in history class at school. In addition, they have various activities and programs through their communities and mass media for their yearly celebration of Independence Day, and Japan is listed as an occupation country.

Regarding further knowledge about Japan, many people know the word "Shinto" well. People may know it due to their educational back ground rather than due to television or radio. Most of those who answered this question had graduated from senior high school or higher education.

As was mentioned in our television section, Japanese programs are well-received in Indonesia, especially cartoons. They often do not realize which programs come from Japan. There are many programs from a variety of foreign countries. They like Kung Fu programs from Hong Kong and drama from India. Japanese programs are also well-liked. There are some trendy Japanese dramas which are popular among Javanese youth, but the majority of people like historical programs, such as "Oshin", "Zatou-ichi", "Shou-gun", and variety shows, like "TV-champion". Children, of course, love Japanese cartoons.

People like Japanese programs because of the similarities in family values to those of Indonesia. This tendency also can be found in the popularity of Japanese comic books in the urban area. When people are interested in other cultures, there are two reasons: difference and similarity. Japanese culture is sometimes liked not only because of its differences as foreign matter, advanced technology or strong discipline, but also because of cultural similarities, such as respecting one's elders.

The stories which have been told over the generations about the Japanese occupation period are quite terrible. Because the Japanese army robbed people's food and clothes, people starved to death. People made clothes from grain bags and even ate banana tree roots. They were forced to work building a tunnel and an air port for the Japanese army. They felt that the Japanese army was very disciplined and had strict, even quite cruel, punishment. However, they said that they also had benefits, such as receiving a new kind of corn seeds, being taught how to plant rice well, or being trained with useful military skills that they used later to resist the Dutch.

As for the image of present Japan and Japanese, some people answered that they have no clear image, or that they don't care about it at all. Some answered that Japanese people are smart, have advanced ideas and that Japan is developed in technology, quite modern, and rich. Many people said Japan is a brother country. They mostly said that present relations between the countries are good, unlike before.

In our findings, it did not always happen that people who live in the city know more about Japan than people in villages do. It might depend on their lifestyles. However, in the interviews with some

intelligentsia in the urban area, they had detailed knowledge about Japan in such areas as the traditional culture, literature and the conditions of modern Japanese society. Even the problem of children's suicide was known.

As for visitors from overseas, there are many foreign travelers in the city, and although visitors are rare in their own villages at the present, they have some historical experiences with Dutch or Japanese during their occupation periods. Even after the war, members of an NGO from Holland came and set up a place for water supply in a community in Peruworejo.

We would like to mention that they do not limit their lives to within their villages. In Puruworejo, either the head of the family or the spouse is a native of the dusun, but many people in their families have worked in big cities before. Furthermore, there are some youth who transmigrated Sumatra or Kalimantan. Some women have worked overseas as servants in such places as Saudi Arabia and Hong Kong on two year programs that are supported by the Indonesian government. Saudi Arabia is an Islamic country, therefore when they finish their work there, they can make the pilgrimage to Mecca as a present, which is very important for Islamic people.

The culture of the farming villages are based on their vaunted cultures, Java and Islam. Therefore it seems that they do not associate with other cultures. Even though they may superficially seem receptive to them because of their social sensibilities, they might never change themselves. The effects of other cultures on villages will increase gradually, however. People in villages will hopefully integrate this input without compromising their own traditional values and culture. We should continue to think about and examine how the Javanese culture, the community culture and Islamic culture will change in the future. It is an important subject.

6. Conclusion

Through our research, we found that the Indonesian administrative system has penetrated all the way down to the bottom of the community structure. This is evident through the various activities and meetings in the villages, such as PKK, Kelompencapir and IDT. Under the guidance of the central government the villagers are encouraged to strive to improve their standard of living and to become self-sufficient through this so-called "bottom-up" system.

Communication at the village level appears to have been effective in bringing about positive changes. After our inquiries about the various meetings held in the villages, we realized that we could have spent all our time on that one aspect and still not have covered it all. For example, PKK has helped villagers in many matters of health care, and the Kelompencapir programs are numerous and have benefited villagers by teaching them useful and practical knowledge about life in rural areas.

A subject of major concern that we encountered in Purworejo is that of the area's severe water shortage. Agricultural endeavors there are particularly unstable and this greatly hinders development and progress in their economic level. The standard of living is on the whole lower than what we found Sarirejo III, where there is plentiful water and an efficient irrigation system. At present, there are projects underway to increase the water supply (i.e. construction of water tanks,) but it is not clear in what time-frame, Purworejo will actually see their completion. Our group also found a marked difference in the overall attitudes toward communication in the two areas, particularly communication which involves information from the outside. We found this difference to be in part due to more the immediate daily needs taking precedence over the relatively superfluous needs for information exchange.

Reflecting positively on government policy, we saw a trend toward a more educated younger generation and find that the mandatory education of recent years is having positive effects: the younger respondents benefit from being fluent in the national Indonesian language, and therefore access to information that many members of the older generation cannot understand. They also tended to be more knowledgeable about foreign countries, including Japan.

When basic needs are met, higher needs can be pursued. We feel that our research confirms this hypothesis made years ago (Maslow's hierarchy of needs.) Through the continuation of mandatory education and perseverance in taking aggressive action toward meeting the everyday basic needs of its people. Indonesia can increase the trend we have witnessed toward more educated, aware and self-sufficient citizens.

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SUMMARY

PROSPECTS FOR THE

PROVINCIAL DEVELOPMENT OF YOGYAKARTA

Prof. Dr. Hirotsune KIMURA

As Prof. Dr. Loekman Soetrisno mentioned in his lecture on "Regional Development: the Case of Yogyakarta Special Region," Education is the premier sector of DIY (Propinsi Daerah Istimewah Yogyakarta: Yogyakarta Special Region Province) followed by the Tourist industry. In other sectors like agriculture, manufacturing and service sectors, we found much the same level of investment and technology in DIY as in other regions.

According to Statistik Indonesia 1995, the number of students in DIY were as follows:

School Level	Amount of Students
Primary School Level	359,535
Junior Secondary	138,429
Senior Secondary Level	112,615
University/College Level	142,269

One can observe that the majority of Primary School Students proceed to Junior High School and once again, the majority of Junior High Students proceed to Senior High School. According to the information collected by OFW, 66 per cent of students in DIY proceed to Senior High compared to 45 per cent at the national level. The more important educational feature of PDIY is that the amount of University/College Students is greater than the number of Senior High School Students and also Junior High School Students. DIY has a concentration of not only Universities and Colleges, but also Senior High Schools attracting their students from other Provinces. This situation has a historical background dating to the period when Yogyakarta was the capital city of Mataram Kingdom and was the centre of Javanese culture. There are 7 national and 56 private Universities and Colleges in DIY. The majority are located in the City of Yogyakarta and Subdistrict (Kecamatan) Depok at the northern edge of the city where the University of Gadjah Mada (UGM), the Indonesian second high rank university, can be found. The remaining colleges are just outside these two administrative boundaries. A comparison of the total population of Yogyakarta City (453 thousand) and Subdistrict (Kecamatan) Depok (95 thousand) with the amount of University/College students indicates that about 25 per cent of the population are students. Unfortunately, students are not good consumers and the high student concentration results in a comparatively low rate of per capita income in Yogyakarta.

In the case of tourism, Yogyakarta accepts the fourth largest number of foreign tourists after the provinces of Bali, Jakarta, and West Java. Bali is very famous sightseeing island throughout the world and attracts very large numbers of people. Bali has a well developed sightseeing industry: quality hotels, restaurants, souvenirs shops, well prepared temples, and so on. Accepting less than 1/3 of foreign sightseers in comparison with Bali, all those factors supporting the sightseeing industry in Yogyakarta are less arranged and less developed. Only recently, has Yogyakarta had two five star hotels. Along Malioboro Street, the main street of the city, few quality establishments can be found. Souvenir shops are all small and, with the exception of silver works, are not of particularly high quality. Even textile batik which is abundant and one of the main souvenirs originating from Yogyakarta is said to be below international standard. Sightseeing spots are not well arranged other than the remains at Borobudur and Prambanan, although there are many other temples and palaces scattered throughout the region. The average foreign tourists' length of stay is 1.8 days in Yogyakarta while it is 3.2 days in Bali (1.9 days in Jakarta). The major weak point would appear to be the cultural separation of these Hindu-Buddhist historical remains and the local Moslem population who work in the tourism industry. In Bali, in comparison, sightseeing spots and people there are bound by Hindu culture. The second weak point of Yogyakarta is the lack of a beautiful seashore to swim due to the high tide of the Indian Ocean. A nearby cool highland resort is also not popular because of the repeated eruptions of Mt. Merapi.

The major problem for provincial development seems to be in the effectiveness of public administration. In Yogyakarta. Development projects are well developed when they are covered by nationally standardised projects through Presidential Degrees (Inpres) like road construction, schools, health care system, electricity, and greening plan. We were impressed by the widespread greening projects when we visited Gunung Kidul District which is famous for its arid highlands.

In economic development aspects, Indonesia has experienced rapid economic growth for the last decade, due largely to a huge inflow of Foreign Direct Investment (FDI) similar to other ASEAN countries like Thailand and Malaysia. In Yogyakarta, however, the province accepted only 10 among 3625 cumulative FDI projects nation-wide during the 30 years from 1967 to 1995, which consists of less than only 0.1 per cent of foreign capital investment. Yogyakarta is an inland region where foreign trade is difficult and thus the province can't hope for large inflows of FDI in the future. General theory estimates that more than 25 per cent of GDP in the manufacturing sector is the standard for an "newly industrialising country." The figure for Indonesia at the national level in 1993 was 21.35 per cent. In Yogyakarta, it is only 12.77 per cent.

Yogyakarta's industrial sector is characterised by a large number of small scale industries making up 90 per cent of the manufacturing sector. A large number of these firms are related to the tourist industry. The key to the development of Yogyakarta is the promotion of this sector. What efforts has the Provincial government made in the past? Human resources are the key for the better development. Yogyakarta has plenty of Universities. What kind of arrangements has the local

government made to co-ordinate the souvenir industry with related university staff especially with the National College of Arts? Yogyakarta is a sister city with Kyoto, the world famous tourist city accepting 30 million sightseers every year. While they exchange human resources, how systematic has the local government been in introducing skills and know how relevant to small industries in its co-operation with Kyoto?

In a visit to a pottery co-operative in Kasongan, a sightseeing village famous for its pottery production, it was found that the co-operative does not have the skill to produce porcelain (jiki) which needs firing at 1200 to 1300 degrees temperature instead of 1000. They also suffered from a shortage of capital. It is necessary to send artisans for training to Bali, Kyoto and even Thailand where they can experience the development of a tourist industry attracting large numbers of tourists. It is necessary for the better development of Yogyakarta to form and strengthen systems of key sectors of regional development. The most promising sector in DIY will be tourist industry. The local government should have the integrated development policy for promoting tourist industry. The findings of this report conclude that this is the responsibility of local government, not the national government.

NOTE: On figures for Yogyakarta, I depend upon *Data Pokok Perencanaan Pembangunan Di Daerah: Propinsi Daerah Istimewah Yogyakarta 1993/1994* (Basic Data for DIY Development Plan 1993/1994), BAPPEDA, 1993/1994 and *Produk Domestik Regional Bruto Propinsi Daerah Istimewah Yogyakarta Dirinci Per Dati : Tahun 1988-1993*, (GDRP of DIY Divided to Districts), BAPPEDA DIY, 1995.