

Overseas Fieldwork Report 2010:

Yogyakarta Province, Indonesia



**Graduate School of International Development
Nagoya University**

Introduction

The nineteenth Overseas Fieldwork (OFW 2010) of the Graduate School of International Development (GSID), Nagoya University, was carried out in Yogyakarta, Indonesia from September 18 to October 2 in 2010. This is the first OFW undertaken in Indonesia since 1998, and the GSID conducted it in close cooperation with Gadjah Mada University. The OFW 2010 was a very important occasion for GSID to strengthen its relationship with this prestigious university in Indonesia.

Considering the relevance of topics to the Yogyakarta context and the expertise of GSID professors, we divided 22 students into four working groups, i.e., (WG1) economy, (WG2) education, (WG3) administration, and (WG4) tourism, for the purpose of studying rural and regional developments of Yogyakarta in an integrated way. They conducted their research, mainly, in Bantul district, southern part of Yogyakarta special province. On October 1, one day before the departure from Yogyakarta, they shared their research findings with resource persons and local authorities of Yogyakarta as well as Indonesian professors and students.

Reflecting comments and advice received at the presentation and on other occasions, participants tried to elaborate their work in the final product. The present volume is a collection of the working group reports.

Acknowledgements

The committee of OFW 2010 is indebted to many people and institutions both in Indonesia and Japan for the successful completion of this year's program.

Our appreciation must be directed first to the people of Bantul, Yogyakarta. We are especially grateful to local authorities including village heads for their generous assistance and cordial hospitality. We also would like to express our sincere gratitude to all of those who kindly provided us precious information in the interviews. We could not have accomplished the OFW successfully without their kind support.

Next, our appreciation goes to the students and advisors of the faculty of Social and Political Science of Gadjah Mada University. We would like to express our sincere appreciation to Dr. Nanang Pamuji Mugasejati, Dr. Suharko, Prof. Riza Noer Arfani, Prof. Ririn Tri Nurhayati and Prof. Hempri Suyama of Gadjah Mada University. Participants of the OFW 2010 received tremendous support from eleven young staffs and graduate students of Gadjah Mada University during the field research. We are grateful for their dedicated cooperation not only as advisors and interpreters but

also as joint researchers.

Last but not least, we are very grateful to those who provided valuable lectures to our participants in the preparatory seminar of OFW 2010: Prof. Aiko Kurasawa of Keio University, Prof. Tagayasu Naito of Tokai University, Dr. Murni Ramli of the Graduate School of Education and Human Development, Nagoya University, and Prof. Hiroshi Osada of GSID. We also would like to thank Ms. Erin Sakakibara for the English editing of this volume.

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List of Participants

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** Group leader, * Sub-leader, # DID: Department of International Development, DICOS: Department of International Cooperation, DICOM: Department of International Communication

Program of OFW 2010

Preparatory Seminar at GSID

Date	Hours	Title of the Lecture	Lecturer
May 12	15:00-16:30	“Introduction to the Year 2010 OFW and Yogyakarta”	Prof. Shimada and Prof. Penghuy (GSID)
May 19	15:00-16:30	“Introduction to Indonesian Economy”	By Prof. Hiroshi Osada, GSID
May 26	15:00-16:30	“Tourism Industry in Yogyakarta”	Prof. Nanang, Visiting Professor at GSID
Jun. 2	15:00-16:30	“Village Survey in Yogyakarta”	Prof. Aiko Kurasawa, Visiting Professor at GSID
Jun. 9	15:00-16:30	“Educational System in Indonesia”	Ms. Murni Ramli, Ph.d Candidate at the Graduate School of Education.
Jun. 16	15:00-16:30	Inter-Group Discussions and Information Sharing	OFW Participants
Jun. 23	15:00-16:30	“Indonesian Society”	Prof. Naito, Visiting Professor at GSID
Jun. 30	15:00-16:30	“Indonesian Administrative System”	Prof. Nanang, Visiting Professor at GSID
Jul. 7	15:00-16:30	“The role of Non-Governmental Organization in Indonesia”	Prof. Suharko, Visiting Professor at GSID
Jul. 14	15:00-15:30	“Research Ethics”	Prof. Koichi Usami, GSID
Jul. 21	15:00-17:00	Presentation of Research Plan	15 minutes for each Working Group

Presentation of Research Findings in Yogyakarta

The interim presentation of research findings was held in Yogyakarta at University Club of Gadjah Mada University on Sep. 30th, 2010. Each WG presented for 20 minutes and followed by Q&A session by the interviewees attending the presentation.

Presentation of Research Findings at GSID

The presentation of research findings was held at GSID by each working group to disseminate and to collect feedback from colleagues on Nov. 17, 2010.

Overall Schedule of Fieldwork in Indonesia

Date	Activities
Sep. 18 (Sat.)	8:00 Meeting at Chubu International Airport 11:15 Departure from Nagoya (GA889) 17:00 Arrival at Denpasar (transit) 18:50 Departure from Denpasar (GA255) 19:05 Arrival at Yogyakarta (<i>Accommodation: Wisma MM UGM Hotel, Yogyakarta</i>)
Sep. 19 (Sun.)	Get-to-know each other gathering and City Observation (all WGs)
Sep. 20 (Mon.)	Office of Provincial Government and Bantul District Office (WG1, WG2, WG3), Office of National Education of the City of Yogyakarta (WG2).
Sep. 21 (Tue.)	Board of Batik and Craft Office (WG1), School Teachers in Kotagede Sub-district (WG2), Office of Education, Youth and Sports in DI, Housing Public Works and Energy Resources Office (WG3), Bangunjiwo Village Head (WG4)
Sep. 22 (Wed.)	Tourism Office of Bantul District (WG1, WG4), School Teachers in Kotagede Sub-district (WG2), Wukirsari Village Head (WG3), Tourism office of Bantul District (WG4)
Sep. 23 (Thu.)	Batik Union (WG1), Officials from DINAS Pendidikan Dasar Kota Bantul (WG2), Local people in Wukirsari Village (WG3), Visit to Kasongan and Kajen sub-village (WG4)
Sep. 24 (Fri.)	Wijirejo Village (WG1), School Teachers and school committee (SMP Negeri 3 Pleret, Bantul District) (WG2), Free Activities, Disaster Risk Reduction Forum (WG3), Kasongan local crafters/traders (WG4)
Sep. 25 (Sat.)	Group Work at Hotel
Sep. 26 (Sun.)	Group Work at Hotel
Sep. 27 (Mon.)	Morita Batik & Street Vendors (WG1), School Teachers and school committee (SD Negeri Wonolelo) (WG2), Wukisari Elementary School (WG3), Kasongan local crafters/traders (WG4)
Sep. 28 (Tue.)	Batik firm (WG1), Wukirsari Village Office (WG3), Krebet Village (WG4)
Sep. 29 (Wed.)	Preparation for Findings Presentation
Sep. 30 (Thu.)	Findings Presentation
Oct. 1 (Fri.)	19:55 Departure from Yogyakarta (GA254) 22:10 Arrival at Denpasar (transit) 01:05 Departure from Denpasar (GA888)
Oct. 2 (Sat.)	09:05 Arrival at Nagoya

The Basic Fact about Indonesia

By Prof. Nanang Pamuji Mugasejati

The word Indonesia is derived from Greek word *Indos* means India and *nesos* means island. Indonesia is big power in Southeast Asia. It has the largest population among its neighbour in the region. It is extremely rich in natural resources. It is strategically located in the heart of Asia and Australia. And the last but not least, it is the largest democratic Muslim country in the world.

This paper will discuss brief but comprehensive information about Indonesia: How this country make progress from authoritarian regime into democratic one? How decentralization and democratization posing serious challenges in Indonesia economic development? And how the liberal economic policy has created a new political tension in Indonesia?

Political History: From Turmoil to Democracy

Before gaining independence in 1945, Indonesia was occupied by several foreign powers, started with Portuguese in the early of 15th century, and then Dutch in the early 16th century and then finally Japan occupied Indonesia for almost 4 years. Indonesia declared its independence after Japan's surrender in the end of World War II, but it was required four years of intermittent negotiations, recurring hostilities, and UN mediation before the Dutch agreed to transfer sovereignty in 1949.¹

Most of the colonizers arrived in Indonesia from the 15th century as trader looking for the sources of valuable commodities, such as nutmeg, cloves and pepper. Among others, the Dutch is the longest colonizer in Indonesia, for almost 350 years. The Dutch colonial power ended in 1942 when the Japanese conquered the Dutch East Indies colonial government. Since then, the Japan colonial power was founded in Indonesia. When Japan surrendered in the World War II, Indonesia declared her independence on August 17, 1945. Sukarno and Muhammad Hatta were elected as the first president and vice president of Indonesia.

¹ Valuable sources for early independence Indonesia is from George McTurnan Kahin, *Nationalism and Revolution in Indonesia*, Ithaca, NY: Cornell University Press, 1951.

The political history of post independence Indonesia can be divided into 3 (three) periods.² The first period was called Old Order (1945-1967) that was basically consisted of two different political systems. In 1945 – 1959 was a parliamentary system under the President Soekarno administration, and followed by Soekarno's authoritarian rule until 1967. Sukarno's basic political philosophy was mainly mixture of three most powerful ideological power in Indonesia: Marxism, nationalism and Islam. His political choice was mainly reflecting his hard work in balancing these three competing forces in Indonesia.

However, the most important Sukarno's political idea is the national ideology (*dasar negara*), called *Pancasila* (the five principles). *Pancasila* is now the formal national ideology of Indonesia. *Pancasila* is based on long time social cooperation practice which is called “*gotong royong*”, which is the traditional principle which uphold idea of cooperation and society harmony.

The five principles of *Pancasila* are:

1. Recognizing the single entity of God. (*Ketuhanan yang Maha Esa*)
2. Humanism which uphold the idea of fairness and civilization. (*Kemanusiaan yang adil dan beradab*)
3. Indonesian integrity. (*Persatuan Indonesia*)
4. Government will be the representative of all society and adopting the principle of accomodation of all society interest. (*Kerakyatan yang dipimpin oleh hikmat kebijaksanaan dalam permusyawaratan/perwakilan*).
5. Equal justice for all Indonesia society. (*Keadilan sosial bagi seluruh rakyat Indonesia*)

The first and the most democratic national election was held in September 29, 1955.³ Unfortunately, the newly democratic Indonesia was not stable due to major political battles among the military, the communist faction and the Islamic groups.⁴

² Historical documents for this period are based on Sekretariat Negara Republik Indonesia, *30 Tahun Indonesia Merdeka*, (Jakarta: Sekretariat Negara Republik Indonesia, 1975).

³ Herbert Feith, *The Decline of Constitutional Democracy in Indonesia*, (Singapore: Equinox Publishing (Asia) Pte Ltd, 2007)

The democratic political system was finally collapsed in 1959 followed by the introduction of *Demokrasi Terpimpin* system, which literally means “Guided Democracy”, by President Soekarno.

This very basic idea of Guided Democracy was to unify the cabinet by including members of all political parties, and to generate a new National Council replacing unstable National Assembly during previous period. This idea was clear consequences of Soekarno unsatisfied with the chaos that happened inside political parties, the attempted to balance the Communists against the army leaders. The Guided Democracy was criticized because its’ authoritarian character, and was widely perceived as a step towards Communist government because under this political institution, Soekarno enjoy almost absolute power as president.

Although Soekarno worked hard to manage the hostile relations between military faction and communist party, finally he failed to do so, when the communist party launched political rebellion in 1965.⁵ The political situation during this period is controversial. Thousands of communist party members were killed in massive political massacre in Indonesia during that time. After several months of military and political struggle, General Soeharto was appointed as the third political power holder. In 1966 the army, under Soeharto command, tried to depose Soekarno, and he resigned as President in 1967 and lived in house arrest until his death.

The second period of Indonesian political history began with the appointment president of Soeharto. The period was commonly called “The New Order” period. Under his presidential, Soeharto constructed a strong, centralised and military-dominated government. Suharto successfully built an authoritarian regime combining centralized control and personal rule. His power was mainly backed by the military (*Angkatan Bersenjata Republik Indonesia*), particularly the military generals which enjoy political privilege under Suharto regime. The armed forces played important roles in imposing political control in order to maintaining social and political stability.

⁵ Rex Mortimer, *Indonesian Communism Under Sukarno: Ideology and Politics, 1959-1965* (New York Ithaca: Cornell University Press, 1974)

Political collaboration between Suharto, military generals, and Chinese rich businessmen finally created the strong political and economic power.⁶

Christian Chua, *Chinese Big Business in Indonesia: The State of the Capital* (Routledge Contemporary Southeast Asia Series), (Routledge, 2008)

Although various political opposition to Suharto existed, the regime was largely stable, thanked to international financial support, oil prices hike, and violent political control. Suharto also built a very strong and large bureaucracy loyal to him. The bureaucracy became the main political mobilization vehicle for Suharto political ambitions. Under his administration, the political parties were practically suppressed and he created his own political party, the *Golkar*, as the dominant political which enjoy political privileges. Other than *Golkar*, only two parties were allowed to compete in elections: a small group of Islamic parties, the PPP (*Partai Persatuan Pembangunan*) and another tiny nationalist party PDI (*Partai Demokrasi Indonesia*).

Although the political system under Soeharto was basically the same as undemocratic as what Soekarno did previously, but drastic changes took place in foreign and economic policies. Different with Soekarno, Soeharto was a supporter of Western capitalism. His anti-Communist stance won him economic and diplomatic support of the West countries during the Cold War period. He revised the foreign direct investment law, which allowed many multinational corporations to operate in Indonesia. The operation of MNCs was previously restricted by Soekarno.

Thanked to oil crisis, Indonesia gained significant economic growth and industrialisation under Soeharto period. He also succeeded in improving health, education and social living standards. Most of Indonesian people welcomed Soeharto as “Father of Development”. Industrialization was started and given priority as one of major national development goals. In short, Soeharto enjoyed his political power almost 32 years, almost unchallenged by any political opposition.

The situation changed gradually in 1990s, when corruption started to be a serious problem in Soeharto’s regime. The privilege enjoyed by military leaders and Soeharto’s family turned into massive political corruption, collusion and nepotism. The

⁶ Christian Chua, *Chinese Big Business in Indonesia: The State of the Capital* (Routledge Contemporary Southeast Asia Series), (Routledge, 2008)

Indonesian people began to express their strong criticism to the Soeharto administration, especially came from new intellectual power led by Amien Rais, the young moslem scholar and chairman of the largest moslem organization, Muhammadiyah. For the first time, people openly asked the Soeharto to resign.

This growing political opposition gained their momentum in 1997 Asian economic crisis, In 1997-1998 Indonesia was the country hardest hit by the Asian economic crisis. When Soeharto decided to put Indonesia under IMF supervision to overcome the financial crisis, the economic situation was worsened. The popular protests widespread across nations and followed by Suharto's resignation on May 21, 1998.

After Soeharto, resignation, Bacharuddin Jusuf Habibie was appointed as his successor. His presidency only in short period from 1998 until 1999. Habibie was the vice president of Indonesia during last Soeharto administration. During his presidency, Habibie took unpopular policy toward East Timor independence. On August 30, 1999 Habibie allowed the UN to conduct political referendum, which ask East Timorese choosing between “special autonomy” within Indonesia or having their own independence. The result was up 78.5% East Timorese voted for independence.

With the end of Habibie terms, Indonesia entered the third period of its political history. This period was named as “Reform Period”, which is lasting until right now. In this period, the first democratically elected President was Abdurrahman Wahid. Abdurrahman Wahid known as Gus Dur, also acknowledged as religious and political leader who ruled from 1999 until 2001.

Under the Gus Dur presidency led to support democratic process, e.g., implementation of regional autonomy program, made Chinese New Year become optional holiday (it was forbidden during Soeharto era), withdrawing the ban of displaying Chinese characters and imports of Chinese publications. Abdurrahman Wahid was recognized as strong supporter of democracy and religious tolerance. With his background from NGO leaders, he introduced some radical changes in Indonesian political system.

Unfortunately, this was perceived as too dangerous by some of political power in Indonesia, especially the military. After series of controversies and political contentions, on July 23, 2001 President Gus Dur was impeached unanimously by the

people's consultative assembly. His position was replaced by Megawati Sukarnoputri, the daughter of Soekarno, who was the Vice President under Gus Dur.

Megawati Sukarnoputri is the first female president in Indonesia. Megawati is chairwoman of Indonesian Democratic Struggle Party or PDI-P (*Partai Demokrasi Indonesia Perjuangan*). It was the biggest opposition political party in Indonesia during Soeharto period. Megawati administration started from July 23, 2001 until October 24, 2004.

Her administration era was really a hard time. Indonesia economy not yet recovered after the strike of financial crises in 1997-1998. At the same time, the rebellion movement in Aceh and Irian Jaya province started to threaten Indonesia social and political integration. In those years, Indonesia suffered from high scale ethnic conflicts in Ambon, Poso, Kalimantan and other regions as well as self-determination conflict in Aceh for more than 30 years. The total victims during that period were estimated more than 30,000 people. The hard times accompanied by her soft leadership created popular dissatisfaction. In 2004 election, she lost her power.

Susilo Bambang Yudhoyono, who replaced Megawati is the current president of Indonesia. Before becoming president, Susilo Bambang Yudhoyono was a military general. He was supported by a newly born political party, the Democratic party. Yudhoyono having vision for the indonesia's future, and his written book with titled "Vision For Change". The points are talking about prosperity, peace, justice and democracy.

He planned upgrading economic prosperity, increasing economic growth until at least 7%, recovering the small and middle size industry. He also concerned about eradicating corruption from top to down level, improving labor law, cut complicated bureaucracy, etc. Under Yudhoyono's presidency, Indonesia cabinet known as United Indonesia cabinet (*Kabinet Indonesia Bersatu*). This cabinet consisting of 36 ministers, coming from almost all political parties, except Megawati's PDIP political party and orther two minor political parties, the *Gerindra* and *Hanura*. These two minor parties were led by other military generals, the rivals of President Yudhoyono.

The transition from authoritarian toward new big democracy is not an easy task. As we will discuss in the next session, size is major impediment in implementing democratic Indonesia. The diversity in terms of cultural, ethnicity, religions as well as

economic prosperity across Indonesian society have been making the installation of democracy mostly problematic.⁷

Indonesian Geography and Population: Managing the Big Size

Indonesia is a Southeast Asian country. Indonesia located between Indian Ocean and Pacific Ocean, and it lies between Asia and Australia continents. Indonesia is an archipelagic country of 17,508 islands stretching along the equator in Southeast Asia, but only 6,000 are inhabited and 1,000 are permanently settled. The big five island in Indonesia are Java, Sumatra, Sulawesi, Kalimantan and Irian Jaya.

This position make Indonesia has strategic sea-lane position as fostering the inter-island and international trade. Total area 1,904,569 sq km and for total sea area, 7.9 million square kilometres, this is including an exclusive economic zone. In term of the total area Indonesia is in the 16th position in the world. Indonesia boundaries are with East Timor, Malaysia on Borneo, and Papua New Guinea on Irian Jaya. Total land boundaries area is 1,758 kilometers, 1,107 kilometers with Malaysia, 820 kilometers with Papua New Guinea and 288 kilometers with East Timor. Other neighbour countries are Singapore, Australia, and the Philippines.

Indonesia claims a 12 nautical mile territorial sea and a 200 nautical mile exclusive economic zone (EEZ), measured from claimed archipelagic straight baselines. Estimated 7.9 million square kilometres for the total area of the Indonesia's territorial sea and an exclusive economic zone.

Some areas of Indonesia dominated by mountains, with the peaks of mountain reaching 3,800 meters from the sea level and some mountains in Papua can reach 5,000 meters from sea level. The highest peak mountain is located in Papua, named Puncak Jaya with 5,030 meters from sea level. Around 400 volcanoes in Indonesia are tectonically unstable, of which 100 are active.

The total area for waterways in Indonesia is around 21,579 kilometers. The prominent rivers in Indonesia are Musi, Batanghari, Indragiri, Kampar rivers located in Sumatra. Kapuas, barito, Mahakam Rivers are located in Kalimantan. Memberamo and

⁷ Jacques Bertrand, *Nationalism and Ethnic Conflict in Indonesia* (Cambridge Asia-Pacific), (Cambridge University Press, 2004)

Digul rivers are located in Papua. Bengawan, Solo, Citarum and Brantas rivers are located in Java. Most of the river in Indonesia function as irrigation for paddy fields.

Since January 1, 1988, Indonesia had three time zones: Western Indonesia Standard Time (GMT + 7), covering all provinces on Sumatra and Java, and the provinces of western and central Kalimantan; Central Indonesia Standard Time (GMT +8), covering the provinces of eastern and southern Kalimantan, all provinces on Sulawesi, and the provinces of Bali, West Nusatenggara, and East Nusatenggara; and Eastern Indonesia Standard Time (GMT + 9), covering the provinces of Maluku and Papua.

Indonesia is fourth rank most populated country after China, India, and United States. The population in Indonesia estimated around 222 million. In 2010, the amount of Indonesia population increasing reached 240,271,522. Indonesia has succeeded in lowering its annual population growth rate from 2.34% during 1970-1980, to 1.98% during 1980-1990, to approximately 1.66% during the 1990s. It is also predicted that the growth rate will decrease to 0.68%. Indonesia succeeded in lowering the population growth because the annual program of national family planning programmes. Java island is the most populated area in Indonesia around 130 million population, inhabited by 59% of the Indonesia total population. Maluku and Papua have 25% of the total area but are only inhabited by 2% of the total population. The average population density is 134 people per square kilometer (347 per sq mi), 79th in the world. Sixty nine of population live in rural areas.

Indonesia is not an Islamic state, but majority society of Indonesia is a Muslim, since about 86,1% of Indonesians are Muslim. The other religion such as Christian is around 8,7%, Hindu is around 3% and Buddhist around 1,8%. Most of the Hindus are living in Bali, as the centre of Hindus people. In Indonesia also recognize animism, still practiced in remote areas. But based on the constitution guarantees freedom of religion only for five religions (Muslim, Christian, Catholic, Hindu, Buddha) recognized by the state.

Culturally, Indonesia is very diverse. There are estimated around 350 ethnolinguistic groups in Indonesia, 180 of them located in Papua. the majority ethnic groups in Indonesia are Javanese is around 45% of population, Sundanese 14% , Madurese 7.5%, coastal Malays 7.5% and the others around 26%.

Demography condition in Indonesia, based on the age structure, 29.4% of Indonesians are under 14 years, 65.6% are between 15 and 64 years, and 5.1% are 65 and older. In 2008, under-5 mortality rank was 66, under-5 mortality rate was 41, annual number of under-5 deaths was 173 thousands, and life expectancy at birth was 71.⁸

Governmental System: Decentralization and Centralization

The legislative power is the hand of People's Consultative Assembly, or the *Majelis Permusyawaratan Rakyat* (MPR). MPR divided into two bodies, representation of political parties (House of Representative/ *Dewan Perwakilan rakyat* or DPR) and representation from provinces all over Indonesia or House of Regional Representative (*Dewan Perwakilan Daerah* or DPD).

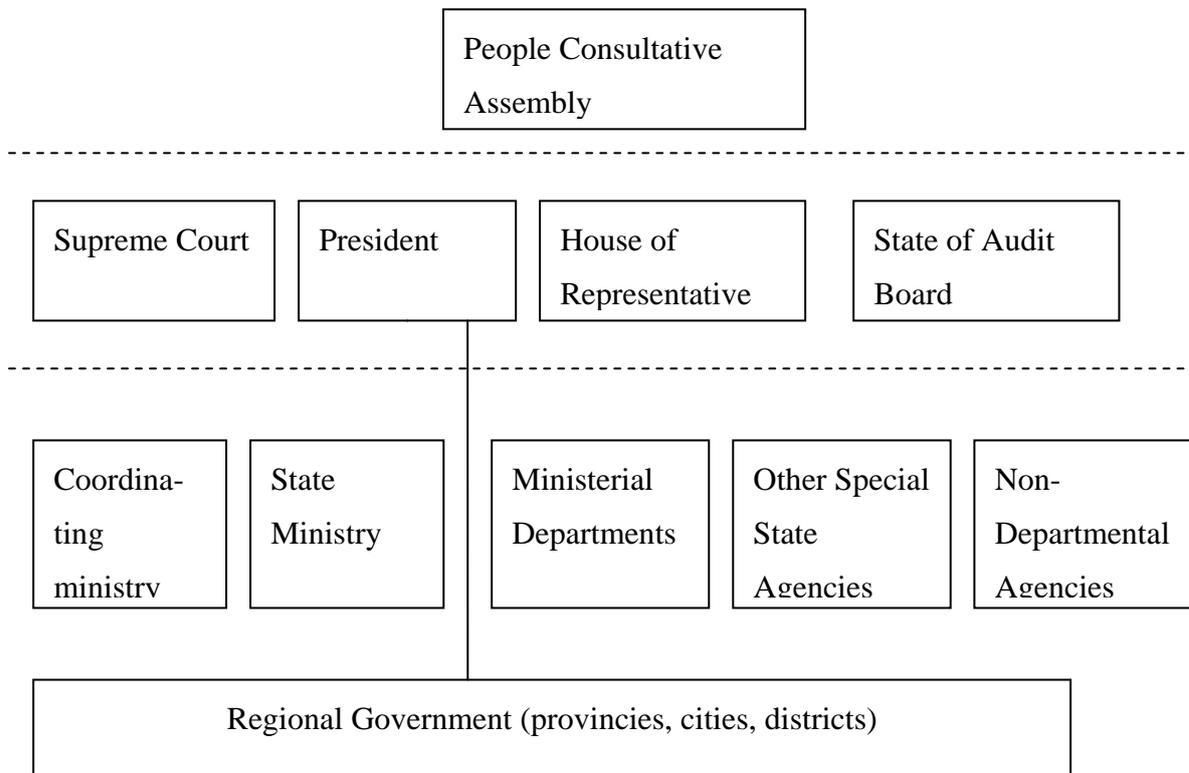
Indonesian President is the highest position in national executive leader. Indonesian president is elected every 5 years through direct general election. The president has the privileged political right to appoint the ministers as his assistants. Indonesia also have an advisory board, the function is to give suggestion for president.

Indonesia is a republic country. Indonesia consist of 30 provinces, two special regions (*daerah istimewa*), and one special capital city (*daerah khusus ibukota*). The policy of decentralization started running on January 1, 2001. After the decentralization policy, administrative concentrated on regencies and municipalities for providing government services.

The capital city of Indonesia is Jakarta, its metropolitan city and the largest city in Indonesia. Jakarta is located in northwest coast of Java. This city is the most populated city in Indonesia, the population is around 9,580,000. the total area is 661 square kilometres (255 sq mi). Jakarta also becoming the centre of culture, politic, and economic activities. Jakarta is divided into five municipalities, each of the them lead by a mayor, and also consist of regency lead by a regent.

⁸ http://www.unicef.org/infobycountry/indonesia_statistics.html

The Government Structure of Indonesia



Source: www.ri.go.id (Indonesia official website)

Regional disparities in Indonesia have been severe compared with other countries, after the financial crisis in 1997 and then worsened by the implementation decentralization act 2004. The decentralization Act stipulating that municipal / regency where the natural resources located, earn higher revenue share compared with the province government and other municipalities/regencies in the same province. With higher revenue share, the prosperous regions will experience faster economic growth and lead to larger inequality between regions.⁹

With the focus to the natural resources revenue sharing, decentralization in Indonesia creating almost no impetus to the emergence of dynamic and vibrant local industrialization. The local government has limited incentives to formulate and implement long-term goals of local industrialization. With the deepening of democracy in local politics, and the weak chain of coordination between central and local

⁹ Adiwan F. Aritenang, “A Study on Indonesia Regions Disparity: Post Decentralization”.

government, Indonesia local development experiencing bureaucratic and political hindrances.¹⁰

The research conducted by KPPOD, Committee for Decentralization Oversight (*Komite Pemantauan Pelaksanaan Otonomi Daerah*) show that only 2 percent of the local governments moving toward business-friendly regulation procedures. The decentralization process in Indonesia at whole is still blocking the goal of creating local development and local industrialization. At the local government side, the tendency to prioritize local budget rather than local GRDP (gross regional domestic product) will still discourage the potential investors that want to stay away from illegal and excessive charges or levies. Local budget (APBD) is relatively failed to function as local economic stimulator.¹¹

Even, democratic institution that was built on the ethnically divided society in Indonesia has failed to create the sense of Indonesia-ness, as a researcher concludes that the rising power of districts has resulted in the establishment of barriers to the inter-district movement of goods, services, capital, and labor across some districts. In some more frequent cases, inter-districts barriers were imposed in some districts, and they may take the form of taxation, tariff and non-tariff barriers. These barriers are often triggering political and policy conflicts among regions. This inward-looking tendency is exacerbated by the idea of giving privileges to people based on their ethnicity or as called *putra daerah* (local people).¹²

¹⁰ Maribeth Erb, *Regionalism in Post-Suharto Indonesia* (RoutledgeCurzon Contemporary Southeast Asia Series), (RoutledgeCurzon, 2004)

¹¹ Various surveys on the relations between local autonomy and economic competitiveness conducted by KPPOD could be accessed from <http://www.kppod.org>. See also, Bambang Brodjonegoro, *Three Years of Fiscal Desecentralization in Indonesia: Its Impact on Regional Economic Development and Fiscal Sustainability*. Downloaded from: [http://www.econ.hit-u.ac.jp/~kokyo/APPPsympo04/Indonesia\(Bambang\).pdf](http://www.econ.hit-u.ac.jp/~kokyo/APPPsympo04/Indonesia(Bambang).pdf)

¹² Riyanto, "Riding Along a Bumpy Road: Indonesian Economy in an Emerging Democratic Era", *ASEAN Economic Bulletin*, Vol. 23, no. 1, April 2006.

Economic Development: the Footprint of Neoliberal Hegemony

During Soekarno era, the economic policy was basically nationalist socialism. Soekarno forbade the massive inflow of foreign direct investment. His economic policy primarily based on political goal of creating economic independence along with political independence, which is popularly known as Berdikari Policy (stands for *Berdiri di Atas Kaki Sendiri*) or Standing on Our Own Feet.

In the early 1960s, right after Soekarno introduced Guided Democracy, Indonesia still dealing with political instability, a young and inexperienced government, and the euphoria of economic nationalism. Those factors resulted in increasing policy mismanagement causing severe poverty and hunger during that time.

After Soeharto took power, government tried to push industrialization. Indonesia started to produce steel, aluminium, and cement. During Soeharto era, the economic policy was aimed at stabilizing currency rate, decreasing of inflation rate, rescheduling foreign debt, attracting more foreign aid and international investment. In 1970s, the oil price hike made Indonesia enjoyed the high economic growth. During 1980s, Indonesia received more foreign investment which the prime engine of rapid development of export oriented of manufacturer sector. Before the crisis of 1997 the average of economy growth was more than 7%.

Unfortunately, in 1997-1998, Indonesia was one of hard-hit countries by Asian financial crisis. The Rupiah value against the US dollar dropped from Rp. 2,600 to Rp. 14,000 and the economy tapered down by 13.7% and the inflation rate touched nearly 60% in 1998. Asked by Soeharto, the International Monetary Fund (IMF) started a \$40 billion program to stabilize the currencies in Indonesia.

Indonesia economic recovery from crisis took longest time, compared to other Southeast Asian countries. Problem with social and political stability as well as corruption at government and business level hampered the economy recovery progress. Under Soeharto era, the economy slumped by corruption, collusion and nepotism. Even though the anti corruption is improving from time to time, in the Reform Period, the slow progress on legal, banking, and corporate reforms as well as terrorism still the major obstacles in full economic recovery.¹³

¹³ David Bevan, *The Political Economy of Poverty, Equity, and Growth : Nigeria and Indonesia* (A World Bank Publication, 1999).

The average annual growth of both GDP and GDP per capita has slowed substantially since the 1980s. The average annual growth of GDP in 1982–92 was 6.9 percent; in the 1992–2002 period, it was 2.5 percent. The average annual growth in GDP per capita for 1982–92 was 5.0 percent, and in 1992–2002 it was 1.1 percent. In 2002 PPP was Rp 6,052.2 trillion (US\$650 billion), and PPP per capita was Rp 28.6 million (US\$3,070), which ranks as 141 out of 208 countries listed by the World Bank. Estimated PPP was Rp7058.7 trillion (US\$758.1 billion) in 2003. The estimated average PPP per capita for 2003 was Rp29.8 million (US\$3,200).¹⁴ The newest estimation for GDP is US\$ 968.5 while the per capita GDP is around US\$ 4000 in 2009.

In 2004 and 2005 GDP increase reached more than 5%, and estimated will increase further. The increase of GDP growth, unfortunately, was not sufficient to scale down the unemployment rate, or boost the labor wage. Estimated around 14.15% of the Indonesian was living under the poverty line (2010), categorising people with purchasing power parity of US\$ 1.55 per day (household income), and almost half of population in Indonesia was living on less than US\$2 per day.

In terms of international trade, Indonesia's important partners for export markets are Japan (22.3%), The United States (13.9%), China (9.1%), and Singapore (8.9%). In other hand the important suppliers for imports are Japan (18.0%), China (16.1%), and Singapore (12.8%). Indonesia is rich with natural resources; the petroleum and natural gas are the most major resources in Indonesia. Indonesia is the world's number one exporter of liquefied natural gas (LNG) and the seventeenth largest oil producer in the world, responsible for about 1.8 percent of world production and 5.2 percent of total Organization of Petroleum Exporting Countries (OPEC) production in 2004.

Mining and mineral production contribute 11.9% of gross domestic product (GDP). The significant product are Crude petroleum and natural gas, 1.2 million barrels of petroleum are produced per day. The golden era of petroleum product was in 1995, 1.6 million barrels per day. Indonesia one of the world's largest exporter for the liquefied natural gas. Central Sumatra is the main area of petroleum production, has about 60 percent of the reserves of coal, of which a total of 114 million tons were

produced nationwide in 2003. Java also other central production of petroleum, and there are substantial proven offshore reserves.

For the liquefied natural gas, an estimated 69 billion cubic meters were produced in 2001, and Indonesia had an estimated proven reserve of 5.5 trillion cubic meters in 2002. The other natural resources of Indonesia are coal, bauxite, gold, copper, nickel, silver, sulphur, iron, and tin. The other significant non-mineral resource is timber. Most of the mining and mineral product take long process and consume a lot of money in production process.

In 2004 agriculture represented a declining share (17.5 percent or lower; down from 20.6 percent in 1993) of gross domestic product (GDP) but employed a majority of workers (an estimated 45 percent of the total labor force) in 2004. Only about 11.3 percent of the total land is arable. Farming is by smallholders and on large private and government-owned commercial plantations. Rice dominates food production, but cassava, corn, fruits, sweet potatoes, and vegetables also are important subsistence crops. Green Revolution technological advances and increased use of fertilizers, pesticides, and irrigation improved rice production in the 1970s and 1980s. Cash crops include cocoa, coffee, copra, palm oil, peanuts, rubber, soybeans, sugar, tea, and tobacco. Animal husbandry (dairy and beef cattle, poultry and eggs, and pigs) and fishing are small but valuable parts of the agricultural sector.

Attempts to ameliorate rural poverty by means of a transmigration program moving families from highly populated agricultural regions such as Central Java to less populated areas in, for example, Sumatra and Kalimantan, have failed. Greatly expanding a program begun by the Dutch early in the twentieth century, at the program's height in the 1979–84 period, the Suharto government moved 500,000 people. Poor funding and preparation, local hostility, suspicions about ulterior motives, and (somewhat ironically) economic growth on Java, brought about a precipitous decline; in 2000 the transmigration program was ended.

To sum up, the history of Indonesian economy was journey from several “trial and error” approaches of economic policy. Started with socialism during Soekarno era and than followed by capitalism in the Soeharto period, proving that both of economic policy paradigm were failed in creating prosperity for most of Indonesian population. The deepening of democracy and the growing influence of American economists

among decision makers put Indonesia economy in the footprint of global neoliberal economic hegemony.

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The Roles of CBOs in Local Development : Case Studies in Yogyakarta, Indonesia

By Prof. Suharko

Introduction

Involvement of Indonesian Government in the provision of basic social services have been less significant in the last decade. It happens due to liberal practices of state where it performs in minimal roles. As seen in the states in which such liberal practices are implemented, its function as basic social service provider is gradually handed over to community or society and market, though at the initial stage it was under government responsibility (Ife & Tesoriero, 2006).

Local community is requested to establish their own institution functioning for the provision of social services for the people. Meanwhile, market is allowed to have authority of freedom to emerge in the areas of social services which was at initial stage provided by the state. Embarking for that situation, people must be responsible for the higher costs of some services. For instance, they always complain about blooming cost of education (ranging from playgroup to the university) and medical and healthcare in health centres (local health center, clinics, hospital, etc).

In this context, the existence and roles of Community Based Organisations (CBOs) are very important to function community-based services. Primarily in the local context, CBO performs its responsibility and play alternative roles because weakening role of government institutions (Ife & Tesoriero, 2006). In some extents, CBO is not considered new for local community in Indonesia. They establish CBO as way to resolve problems in regard to social services for the shake of themselves. When government involvement downshifts, this CBO comes up as community agent in grassroot level in order to keep it survive and guarantee that social services is given in well-managed manner.

This paper is in attempt to uncover the important roles and existence of CBO through elaboration arised from several cases in Yogyakarta, Indonesia. Presentation about the general concept and roles will firstly highlighted and afterward it continues

with its milestones in the context of community Indonesia. Three case studies of CBOs will also be pointed out to view closely some of CBO's activities. And the last section will be summarised with concluding remarks.

Local Institutions and Development

In general context of developing countries as asserted by Uphoff (1986) and Esmand & Uphoff (1984), there are many organisations at the local level. It arises because of two main reasons. First of all, people are more easily to formulate their common interests and proliferate their effort in making it possible through collective actions. Intense social interaction enables them to instantly formulate common interests and perform it through collective actions. Second of all, people use local level as a basic means to make decisions and mobilise resources because established identity is located within smaller groups. In relatively micro social unit, people are easily make a move forward to organise themselves for decision making processes and to mobilise resource in realising common interests possible for them.

Local levels, as Uphoff (1986) emphasizes, can be defined as social space or units under sub-district level that consists of relations among communities (locality), community, and social groups. Locality levels composites many communities where cooperative and commercial relations are fostered. Community level is a unit of social economic settlement which is independently established. Meanwhile, group level is that, people who are independently able to identify themselves as the owner of collective interests such small settlement groups as sub-villages, neighbor clusters, group of jobs, or any others groupings that forms based on races, cast, ethnicity, gender, and so forth. At these levels, people usually make a decision for designing and implementing collective action. The people initiate and develop various local organisations. As in table below, there are three categories of local organisations.

Table 1. Categories of Local Organizations/Institutions

No	Category/ sector	Name of Organization	Definition
1	Public sector	Local administration	Local agencies and staff of central government ministries, accountable to bureaucratic superior
		Local government	Elected or appointed bodies such as village councils or panchayats, having authority to deal with development and regulatory tasks and accountable local residents, in contrast to local administration
2	Voluntary sector	Membership Organizations	Local self-help associations whose members may seek to handle <ol style="list-style-type: none"> 1. multiple tasks : local development associations, committee of village development – in Indonesian context: neighborhood association and clusters, etc; 2. specific tasks: water users' association managing irrigation, health committees overseeing village programs – in Indonesian context: integrated health service at subvillage (<i>posyandu</i>), etc; 3. needs of members who are some particular characteristic or interest in common, e.g. mothers' clubs, caste associations, tenant unions,
		Cooperatives	Kinds of local organizations that pool members' economic resources for their benefits, e.g. marketing associations, credit unions, consumer societies, or producer co-ops, also rotating credit and saving association in Indonesia.
3	Private sector	Service organizations	Local organizations formed primarily to help persons other than members though members may benefit from them. Example are religious or charitable associations, service clubs, Red Cross or Red Cressent societies, etc.
		Private Businesses	Either independent operations or branches of extra-local enterprises engaged in manufacturing, services and/or trade.

Source: Uphoff (1986: 4-5)

General Characteristics of CBOs in Indonesia

Based on categorization developed by Uphoff (1986) above, this paper posits all local organizations or associations belonging to voluntary sector as community based organizations (CBOs). CBOs are established by community based on their interests and aspirations. Coverage of CBO activities is at the levels of community, sub-villages, and some occasion having network outside village. Membership in the CBO is voluntary based. Social relations developed in it are informal, familiar, and interpersonal.

According to Widodo & Suradi (2004), Indonesian people have long been establish social institution or local wisdom for fulfilling basic needs, reaching resources and services as well as taking part in community activities. Thus mechanism has been well institutionalized in a sphere which takes form of organization either based on religion, ethnicity or tribes. In some Indonesian regions, institution or organization who run this activity have various terms such as “Mapalus” in North Sulawesi, “Banjar” in Bali, “Todung Natolu” in South Sumatra, and “Rereyungan Sarupi” in West Java.

In Indonesian context, CBO covers organisations that are formed by local community in the local area such neighborhood association and cluster (RT/ RW), Islam activities in the conduit of Koranic chanting (maj’lis ta’lim/pengajian and yasinan), community association, ethnical association, village youth association/club, neighborhood based woman association (*kelompok dasawisma*), mourning association, youth Hindhu/Buddha association, community financial membership, arts club, traditional community association, youth association for community services (*kelompok ‘sinoman’* in Jawa), health benefit fund (dana sehat), etc (Widodo & Suradi, 2004). The CBO terminologies vary in different region. The term of “banjar dharma prawedhi” is used in West Nusa Tenggara as institution that grant benefits and charity allowance to those in need. In West Sumatra, “tani saiyo gerahan” as organisation that grants aids to those suffer from calamity or disasters.

In general there are two forms of CBO development. Firstly, CBOs are independently established by local community as their needs and community aspirations, such as Koranic chanting association, family descendants group (“trah” in Javanese society), and so forth. This establishment is usually in regard to

endeavors in order to retain and preserve local values, traditions, customaries, and also resources. Secondly, CBOs are established by the government as a mean to implement development programs such as Family Welfare and Empowerment (PKK), Integrated Healthcare Service (POSYANDU), Community Independent and Self-Resilience Board (Badan Keswadayaan Masyarakat), Village Youth Club (Karang Taruna) and so forth.

Activities of CBOs cover extended matters. Shortly, referring to Widodo & Suradi (2004), in general, CBO activities can be categorised as follows:

- a) ritual and cultural activities,
- b) sport and art activities,
- c) religious and social activities,
- d) basic social services, and
- e) community based economic activities.

CBO has various financing resources. In general CBO raises fund from membership fee. Other financing resources may be obtained from donation of social groups, corporates, individuals, government aids and subsidy, benefits of activities, etc.

Case Studies

Case study 1 : ‘Kampung Cyber’ⁱ

Kampung Cyber (Cyber Kampong) is situated in RT 36, Kampung Taman, Yogyakarta City (within Yogyakarta Palace). Its population consists of 43 households including 132 individuals. Their main livelihood are earned from batik tradings and some of them are as batik supplier, tourist guide, private employees, and government officials.

The Cyber Kampong was initiated in 2008. The ideas were inspired by a program of “Yogyakarta Cyber Province” that was developed earlied by the government of Yogyakarta Province. Fundamental situation was a backdrop for its early development where local community overcome accessibility constraints in such

technology. All of people in this community were independently creating ways of making possible this system as affordable means for community members (neighborhood association-RT). They augmented the function of security post as learning spot and accessing internet. The security post is places in the most strategic vicinity that enables people to reach it. An internet connection is available on a computer put in this security post. Local people who has not been capable of using internet may use it free of charge in turns.

Until 2010, 80 % of houses in this *kampong* have connected to internet connection and networks. Local people purchased hardwares and also pay for monthly subscribtion which is worth Rp.50.000 with unlimited access. Internet networks installations were undertaken independently by them with available equipments at that time. Those who were not able to own computer at home may access internet in the security post free of charge.

In its early stage, only small number of community members who were willing to use internet. However, in line with their encouragement to learn further internet, along times more people are capable of using and demonstrating their ability for internet use. In the pursuit of better skills in internet use, internet and computer training as well as writing skill enrichment were carried out locally. Afterward they have skills in demonstrating blog development, creating Facebook accounts for networkings, and also other internet based learnings.

Activities and updated news as well as information about kampong are instantly uploaded to a blog or website which were set out by themselves. It can be accessed on <<<http://rt36taman.multiply.com>>>. Some creativities, initiatives, and craftmanships are now available on it for public exposure and it is also used to forge relations with many parties who are interested in their activities. This website have attracted some national TV programmes to broadcast their local activities in Kampong Cyber. Metro TV and Indosiar as two national TV station covering all Indonesia have ever broadcasted them.

With that affordable and easy internet access, several community members continue their networkings through Facebook, and some of them are working on their own blog. By using such programmes, they take benefit from it. A housewife who is

keen on cooking, use internet to download all of recipes for differing cuisines and afterward she sells it out. She also take advantage of being Facebook members to promote and market it. Some of local traders and other entrepreneurs furnish and customise their blogs to market their products and in the latter stage, they can figure out an increasing profit. Meanwhile, children obtain learning materials to support their school assignments from this internet connection. When people met each other in the security post, they cordially interact, exchange information, and of course learn together. Community members become more congenial, friendly, and bounding-up also finally able to create action plans together. These activities are then uploaded on website, so that all people and even other parties can recognise and acknowledge them. By this mean local people endeavor to sustain and tie up their social solidarity. Also, through website they are recently expandings their social networks with other parties.

Briefly, the Cyber Kampong provides many benefits for the members of community, as follows:

1. Developing knowledge and life skills by using internet as a learning source,
2. Informing & marketing a product through blog, email, facebook, etc,
3. Increasing product sales and income,
4. Tightening social solidarity,
5. Enlarging social network of the community.

Case study 2 : Gambiran Green Kampongⁱⁱ

Gambiran Geen Kampong is an initiative of local community residing in Pandeyan RW 08 village, Umbulharjo subdistrict, Yogyakarta Province. It is located in the riverside of Gadjah Wong. Unlike common community in the riverside where poor people live in, many people ranging from high status to lower social status settle in this area. Social composition of the people shows more variants as they are the locals and some of them are newcomers, so it affect employment structure which consists of trader, merchants, labour, government officials, lecturers, and also private employees.

Unlike other kampongs located in the riverside which are so much messy and unmanaged, environment within this kampong's area is much cleaner and the housing complex looks well-arranged. This better environments is resulted from the collective actions performed by local people who live mostly in riverside. They are in excellent attempts in shifting the images and real situation of kampong which was notably worsened by the massive emergence of waste. Facilitated through several community meetings, local people then agreed to set up a program on environmental arrangement. It was demonstrated by community cleaning event, waste management, sanitation, and also replantations. In the conduct of these activities, local people were collectively establish a "Green Kampong" agents to implement those goals.

In creating green kampong, local people were organized into collective activities and institutionalized in task groups. They finally arranged 8 task groups who are responsible for different job description:

1. Sanitation Task Group. This group focuses on fixing up sanitation channels within their areas. With aids from the city government and self-finance they developed public toilets and bathrooms in RT 45 and also RT 30, sanitation infrastructure in RT 45, and also water treatments in RT 32 and RT 30. This task group has successfully completed Waste Management Installation (IPAL) which has been place in some venues in Kampong Gambiran. Recently local community has been capable to construct pipelines from their own house. These pipelines link up main dung containers to each of houses. By this IPAL construction local people no longer release their domestic wastes and dungs to the Gajah Wong river.
2. Waste management task group. This task group is entitled to fix up waste management as main problem for community living in the riverside. Collective waste management is centered in different 5 areas of RT, starting from household level. Each of household should provide plastic bags to load waste based on its categorization. The waste separation is performed by arranging commercially potential garbage, and also disposal garbage in different packs. Every twice a week, each of cadre and also local beggars are invited to take away those wastes. Environmental cadre is assigned to distributed it according to the schedule agreed. To support their works, local

community conduct regular meeting and request the community members to pay Rp.500.00-Rp.1.000. This money will be then collected as community deposit for financing their environment cleaning-related activities.

Waste management especially the organic ones are done independently by local community. All tools and equipments are created from materials which are easily obtained, for instance putting a plumb on plastic buckets and clay-made water container for biodigesting machines. Beforehand, chemical biostater of so-called as EM4 is mixed in it to ensure further chemical processes. The residue resulted from this processed can be used for domestic purpose, be commercialized and even for fertilizer for gardening at home.

3. River task group. This group's focus is on tackling physical issues of river such as erosion and dump-shifting problems. The projects are initiated by previous landslides disaster which caused housing destruction, such as in art-gallery and labor training centre. Their main activities are to wrap up with metal web the riverside walls in order to avert upcoming erosion in Gajah Wong river. This activity is assigned to RT 30 and RT 45 because they live in adjacent to the riverside.
4. Alternative energy task group. Biogas which is centered in RT 30 is alternative energy developed in this community. Biogas materials are basically mixed from decomposing residu (as EM4) and also IPAL's residue. First trials on this alternative energy had ever been done for lighting when a badminton competition was rolled out. Government of Yogyakarta city made this competition as a mean for trial and experimental activities. However, the use of biogas has not been largely recognized by local community.
5. Local food task force. This group provides a sphere for local people who have home based food industries especially traditional food (such as *kipo*, *geplak*, and *yangko*). They are encouraged and empowered to make traditional food by optimizing natural and healthy ingredients. Not only that, environmental friendly ingredients are also another extent that becomes their main concern.
6. Library task group. This group manages a community library which is so named "*Jendela Nusa Indah*" and situated in reachable spot, so they place it near compound and public toilets. Education Board of Yogyakarta City has supported them with financial aids for its early development. A group of

youth studying in Secondary School level is now assigned to be responsible for this library. The main objectives of it are to promote environmental education for children and also become a good centre for early childhood education.

7. Public sphere task group. The main responsibility of this group is to facilitate the provision of public space for community activities. It is realized because of limited public spaces available in the area. The augmentation of public space is carried out by giving away private land areas with width of 380m² and 512m². This area is recently occupied for security post and children amusement parks that belong to early childhood centre, as well as sporting activities.
8. Replanting and gardening task force. For the sake of green environment and also in the pursuit of the best green kampong, some women run gardening project and replanting activities in RT 15. This activity gained financial support from Che CHI foundation, Environmental Board of Yogyakarta City, and Forestry Department of Yogyakarta Province. They have developed “Program Pagar Hidup” (Living Fence Environment Programmes) and optimized a plant which is so-called *Acalypha siamensis* for this programme. The ones who have brick fences are highly suggested to grow specific plants for decoration, herbs, and others on the fences.

Instead of it, this task group also manages community cleaning programme to clean up all surroundings located in each households twice a day. Meanwhile to keep all public infrastructures cleaned, they also arrange such activity 2-7 times a week. Every neighborhood cluster is demanded to run weekly cleaning day.

These collective actions are organized mostly by local women and their efforts have contribute to the success of community and won many competitions such as 2nd place in the Cleanest Area in Yogyakarta 2007, 1st place for Free Crime Areas, the big 10th of Green Kampong trials (accredited by WALHI national level, 2007), 1st place in Cleanest Group for Gajah Wong category in 2008, and nominee for national winner for cleanest kampong on 2008.

Case study 3. Forum for Disaster Risk Reduction (Forum Pengurangan Resiko Bencana-FPRB) in Wukirsari ⁱⁱⁱ

FPRB was established by youths in Wukirsari village, Imogiri subdistrict, Bantul regency. This forum is fully supported by village chief and community leaders. Its establishment is part of efforts in leveraging information accessibility about disaster (specifically for earthquake) and disaster risk reduction.

FPRB has strong spirit and vision to reach its goals as trustful organisation in Wukirsari local community empowerment and its vicinity. This organisation is partially based on the cultural habituation for Disaster Risk Reduction and Climate Change Adaptation (CCA). These visions can be reached through following means:

1. Encouraging local awareness in Wukirsari village and its vicinity about potential threat and vulnerability of disasters.
2. Empower women participation, entrepreneur, and children for disaster risk reduction
3. Strengthening civil society, specifically from family to regency level along the way of disaster risk reduction.

With financial assistances from local people, NGOs, international donors, private sectors (through CSR programmes) and government agencies, FPRB in Wukirsari develops and runs several programmes as well as activities to reach that visions and missions:

1. Drinking Water Management in village level

Drought has make people more suffer in some areas in Wukirsari, especially Pucung sub-village and Nogosari sub-village. In 2007 awarenese of managing drinking water among local people boosted up and with supplementary participative analysis under threat, potential, and vulnerability assesment, various programmes and activities arise as means to reduce disaster risk management and minimise risk caused by drought in Wukirsari. This progamme is also replicated in other villages such Srimulyo, Muntuk, Jatimulyo, and Selopamioro.

2. Training and socialisation about disaster risk for community facilitator

This activities ranging from training to socialisation about disaster risk management organised by FPRB Wukirsari. FPRB has conducted many trainings for facilitators who will assist disaster risk activities in this village and its neighbouring areas. On May 2010 FPRB facilitated disaster risk socialisation for facilitators in Wijirejo village and Gilangharjo-Pandak County, also Sumbermulyo and Mulyodadi in Bambanglipuro county, Bantul.

3. Training and socialisation about disaster preparedness and simulation.

Disaster simulation especially earthquake has been done in sub-village level and in 5 primary schools located in Wukirsari village. This activity is form of partnership between FPRB and village authority of Wukirsari as well as NGO who has working areas around this region.

4. Early warning system development

This early warning system is set up with additional mobile communication which does not too much use electricity, such as handy talky. This equipment was preferred as relying on earthquake in year of 2006, many mobile phones was disabled due to lack of electricity supply from National Electricity Company (PLN). Instead of it, this forum has extended coordination system such as disaster management and disseminating information ranging from neighbourhood subcluster (RT) to village level.

5. Potential Threat Analysis, Vulnerability, and Community Capacity in Disaster Risk Reduction

Technically this potential risk analysis involves community in Wukirsari and all stakeholders. This analysis employed Participative Rural Appraisal where all community members were actively engaged in making a change for disaster mitigation. This work has resulted in many important documents such as Village Potential Map, Disaster Vulnerability Assesment, Calendar of Season, Matrix Transect Walk, and Venn Diagram for Institution.

6. Network expansion and partnership with similar organisation

The efforts in network expansion and partner organisation are necessary because disaster is out of administration boundary, so that disaster risk reduction should be carried out surpassing administrative borders. Concerning to this extent, this

forum is actively involved in creating sphere for regular discussion about disaster in village level as well as Bantul entirely (FPRB Patalan and FPRB Sriharjo village). This media is as for place to transfer knowledge and exchange experience.

7. Public Policy Advocacy

In regard to public policy on disaster risk management, this forum has carried out numerous important activities which involved village authorities and other stakeholders. It was also to formulate village regulation No. 6 year of 2009 on Disaster Risk Management. A collective forum involved by Bantul authority, Wukirsari village authority, Java Reconstruction Fund, and World Bank has been impetus for local relocation of people living in landslide vulnerable areas and drought (catagorised into multi hazard). Aside of it, this forum also ensure that disaster risk-based development in Wukirsari and its nighbouring villages is well-involved in the number of discussions for local development planning, especially village development planning meeting (musrenbangdes).

FPRB Wukirsari is a youth-membered organisation in the field of disatser that counts as the most active in Yogyakarta Province. Recently, this organisation takes a lead 3 FPRB in other villages in Bantul regency. In light with its work, this organisation also forge partnership with some disaster mitigation-led institution, such as FPRB in provincial level, Regional Board of Disaster Mitigation (BPBD) at Yogyakarta Province, Red Cross Bantul, Department of Social Affairs-Bantul and Yogyakarta Province, Board of Unified Nation and Social Protection (KESBANGLINMAS) at provincial level.

Other stakeholders whom FPRB forged to support its work such as: relevant organisations, and board, Imogiri County authority, University and disaster centres such as Center for Disaster Gadjah Mada University and Akprind Yogyakarta, Financing institution in village level (LKD) of Wukirsari, NGO (Institute for Research and Empowerment and Java Reconstruction Funds), and international NGOs (CordAid and CWS).

Concluding Remarks

According to three differing cases above, referring to Uphoff (1986), CBO produces three main outputs as follows:

1. producing public goods: subvillage road, bridge, neighborhood security post (*gardu ronda*), learning centre (*sanggar belajar*), other community facilities,
2. producing goods and services for individual & community needs, and
3. providing non-materials benefits (spiritual, social, cultural benefits) for the members of association and community

Those cases also confirm that CBO is part of local means in meeting basic needs and addressing social problems. CBO activities are varied depend on the interests and needs of local people. CBO plays several significant roles for community livelihood, as follows: :

- ✓ Maintaining cultural identity,
- ✓ Delivering information & sharing knowledge,
- ✓ Providing basic social services,
- ✓ Providing social space for meeting social & cultural needs,
- ✓ Mediating social dispute and conflict,
- ✓ Advocating the interests of community,
- ✓ Strengthening local economic.

Those roles above embed higher sustainability rate because of two main reason. First of all, community member have really experienced output and benefits from CBOs. Second of all, as viewed in those three cases, CBOs have capability of expanding networks with various stakeholders such as NGO's, the governments, funding agencies, and corporations.

It is not overwhelming to argue that in the level of Indonesian community, a concept of "welfare society" is actually set up whereas scheme and mechanism in the provision and fulfilment of various basic needs for community are created and self-funded by community itself by organising CBO without any dependence to government programmes. Welfare society practices are reflected from community creativity in setting up various local institutions, self-financing, and self-reliance to expand and implement service systems and social security. In local level different

range of CBOs and other social institutions which provide scheme and mechanism for education, healthcare, economic upliftment, and other social services.

Acknowledgement

This report has made possible with assistance of Pratiwi and Niken Budi Pratiwi for their efforts in collecting data during fieldwork. My highest appreciation goes to their endeavors. I am also indebted to Meredian Alam at the University of Oslo, Norway for the language editing and proofreading.

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ⁱ . According to the report from Michael Adi Pradipta, 2010 and also informasi available on the “Kampung Cyber”’s Website

ⁱⁱ .This section is based on report from Fuji Riang Prastowo, 2010

ⁱⁱⁱ . Data for this section gathered by Pratiwi during Overseas Fieldwork (OFW) GSID-Nagoya University in Wukirsari, Bantul, September 2010.

Working Group 1
Economic Development

**Batik Industry Value Chain and Global
Promotion of Yogyakarta Province:
-Constraints and Opportunities-**

1. Introduction
2. Research Objective
3. Research Questions
4. Literature Review
5. Methodology
6. Results: Objective 1
7. Results: Objective 2
8. Concluding Remarks and Recommendations
9. Acknowledgement
10. References

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1. Introduction

1.1 Economic Situation of Yogyakarta

Yogyakarta Province is one of the most populated areas in Central Java, Indonesia. According to Koing et al (2010) the province is threatened by two main factors: high population pressure and frequent natural hazards. High migration rates and economic growth have resulted in fast growing urban-rural expansion, mainly by land use conversions from farming into developed areas. The main economic activities in terms of regional gross domestic product (GDP) are concentrated in the service sector (40%), agriculture (15%), and manufacturing (40%).

There are five districts in Yogyakarta: Bantul in the south (506.86 km²), Sleman in the north (574.82 km²), Kulon Progo in the west (586.27 km²), Gunung Kidul in the east (1,485.36 km²), and Yogyakarta City in the center (32.5 km²). The northern part of Yogyakarta is situated near the foothills of the Merapi volcano, which is considered one of the most active volcanoes in the world. The last big eruption occurred in 2006, which resulted in dramatic devastation of the Sleman and Bantul Districts, along with the suburbs of Yogyakarta City. Yogyakarta is 2,968 meters above sea level. The climate is tropical, with average temperatures around 26.5 °C and a high mean annual rainfall of approximately 1,855 mm.

Yogyakarta is characterized by industries in the city and small scale subsistence agriculture in the suburban and rural areas. From 1993 to 2006, urban developments and new rural settlements doubled, while the area of farmland decreased by 25%. Rural areas, including home- or forest gardens, account for 16%, and urban areas for 4%. The remaining area belongs to forests and coastal protection zones.

1.2 Handicraft Industry

The handicraft industry is a traditional industry, which has been contributing the economic growth of Yogyakarta's manufacturing sector (Badan Pusat Statistik Provinsi D.I. Yogyakarta, 2009, p.520). The main handicraft products are textiles, wood products, furniture, leather products and ceramics. These products are sold not only to domestic people, but also to tourists who visit Yogyakarta. In addition, many handicraft products are now exported all over the world.

As for textile production, Yogyakarta produces a Javanese traditional fabric called "Batik". Batik is a cloth that uses a manual wax-resist dyeing technique, which was invented in Java

around the mid-18th century. The wax-resist dyeing methods of Batik have three categories: hand-written, hand stamped, and a combination of the two. Batik products are mainly produced by a domestic cottage industry, which is home-based rather than factory-based with a wide variety of products in small quantities. Although Batik production has been mechanized by introducing chemical dye and printing machines, and 90% of the current Batik production is printed Batik (printed like real Batik by machines), original handmade Batik is still produced in the traditional way in several places such as Solo City in Bantul District and Pekalongan City in Central Java Province. Unique and distinctive motifs and the high quality of Yogyakarta's Batik hand-made with experienced craftsmanship are popular for not only domestic people, but also foreign tourists (村井, 佐伯 2004, p.202-p.203). Therefore, the handicraft industry, especially Batik production, can have a great potential to contribute to global promotion and economic growth of Yogyakarta. However, in order for the Batik industry to grow, it is important to understand its production process and value chain and identify how the Batik industry in Yogyakarta can enhance efficiency.

1.3 Tourism Industry

Due to the existence of several important tourism attractions, such as the Borobudur and Prambanan ancient temple complexes, as well as its local handicraft products and the living cultural traditions, Yogyakarta is considered as a cultural tourism destination, attracting large numbers of tourists in Indonesia. Furthermore, according to Timothy (1999), although Yogyakarta was served by international flights only from early 2004, it is the transportation and accommodation center for most visitors to this part of Central Java. Despite the fact that most international travelers perceive Yogyakarta as a supporting, rather than a main destination, the city functions as the base for sightseeing at the above mentioned temples and provides many additional cultural and historical attractions, including crafts of many kinds such as Batik, leather work, woodcarving etc. Indeed, both local and international tourists are the main potential buyers of the local handicraft products in Yogyakarta and vice versa, the handicraft sector may constitute an attraction for tourists in Yogyakarta, all of which contribute to the local and national economy. Moreover, more than 30% of handicrafts produced in Bali and in Kasongan, Yogyakarta are bought directly by both domestic and international tourists, while 70% are exported or are sold through wholesalers. The National Statistics Bureau reported that Indonesian total exports in handicrafts in 2004 were valued at US\$ 447 million, increasing 4.06% in 2005 to US\$ 466 million. This excludes handicrafts bought directly by consumers or

transported by tourists. Hence, the economic linkages between tourism and handicraft production are interdependent of each other.

According to Timothy (1999), taking into account the fact that 963,995 tourists stayed in Yogyakarta in 1994, it became one of the most important destinations in the country, and the national government recognized the province's potential for tourism. Thus, many of its planning efforts have included Yogyakarta. This situation has had an important impact on the behavior and the daily activities of the local population, who started, for example, to convert their original dwellings into tourism facilities such as guesthouses and souvenir shops (Dermawati, 1994). Moreover, Timothy in his work related to the "Participatory Planning of Tourism in Indonesia," described that in order to target this increasing number of tourists and to gain more profits, a number of small and informal cooperative ventures, based on similar products had been formed. One such example is that of a cooperative of Batik sellers who came together to reduce the costs of supplies through high-volume purchasing. He suggested also that a number of "street vendors" aiming to sell products directly to tourists in an informal way in Yogyakarta started also to be recognized by the local authority, because street vending in Yogyakarta was seen to be quite profitable for local crafters and contributed to significantly increase their income. This linkage between the tourism industry and handicrafts in Yogyakarta is also supported by Dharoko (1994), who found that local residents are the largest market for Yogyakarta's vendors, followed by domestic tourists and then foreign tourists. For other types of vendors of handicrafts, foreign tourists comprise approximately a quarter of all customers. This demonstrates the existing strong linkage between the tourism industry and handicrafts in the region, Therefore, the concept of "Participatory Tourism Planning" started to be adopted by the local authority including all stakeholders, such as tourism operators as well as handicraft producers, in order to create the global promotion of Yogyakarta (Timothy, 1999).

The Special Province of Yogyakarta (DIY) in central Java comprises the city of Yogyakarta and four regencies.¹ Yogyakarta is the only province in Indonesia that is still governed the Sultan, who serves as the hereditary governor of the province. Known as the second tourism destination in Indonesia after Bali and the Indonesia's most renowned centers of higher education, Yogyakarta's potential attractions include a combination of ancient temples, history, traditions, culture, and natural resources. The key attractions of Yogyakarta are "Kraton," the Sultan's Palace and Malioboro Street. Moreover, Yogyakarta acts as an accommodation base for

¹ Bantul, Gunung Kidul, Kulon Progo and Sleman

visitors to the nearby temple complexes of Borobudur and Prambanan (both UNESCO World Heritage sites) and is increasingly marketed as the cultural heart of Java (Dahles, 2002). Yogya is also known for its cultural attractions such as Ramayana ballet (a drama in typical Javanese dance) and Wayang Kulit shadow puppets accompanied by gamelan orchestras, and produces handicrafts such as Batik, stones, wood, leather and ceramic.

Yogyakarta has a good transportation network, which includes a main railway station with express services to Jakarta, Surabaya, Solo and the Adisucipto International Airport, which serves both domestic and international flights. There are also relatively good roads for connecting Yogyakarta to others destinations throughout the island, including Jakarta, Surabaya and Badung, as well as within Yogyakarta district. Yogyakarta has created accommodations at international standards as depicted by the Table 1.

Table 1: Number of Accommodations by Province, Indonesia 2009.

Province	Establishment		Room		Bed	
	Classified	Non classified	Classified	Non classified	Classified	Non classified
Jakarta (DKI)	153	197	26,179	6,338	37,046	8,682
Yogyakarta (DIY)	34	1,091	3,434	12,077	5,466	17,714
B a l i	149	1,515	18,684	21,775	29,346	32,702
Indonesia	1,240	12,692	118,716	216,101	183,744	335,461

Source: compiled by authors from Badan Pusat Statistik (<http://dds.bps.go.id/eng/index.php>), 2010

Yogyakarta attracts both local and international tourists. During 2003 to 2009, almost one quarter of all tourists was composed of foreign tourists. Timothy and Wall (1995) observed that almost twice as many domestic visitors as foreign visitors stay in Yogya. Therefore, despite the growing importance of Yogya as a foreign tourist destination, the number of domestic tourists is still increasing in large proportions. The average length of stay of domestic tourists in Yogyakarta was 1.5 nights, which is half of the average length of stay of the domestic tourists in Bali. Foreign tourists stay longer in Yogyakarta and Bali in comparison, averaging 2 and 3.4 nights in Yogyakarta and Bali, respectively. (Badan Pusat Statistik, 2009) (Table 2).

Table 2: Visitors in Yogyakarta 2003 - 2009

Year	Foreign visitors	Domestic visitors	Total visitors
2003	622,962	1,612,416	2,235,378
2004	611,876	1,715,839	2,327,715
2005	647,380	1,362,719	2,010,099
2006	536,174	1,550,366	2,086,540
2007	619,997	1,850,465	2,470,462
2008	618,111	2,471,655	3,089,766
2009	676,512	2,601,755	3,278,267

Source: compiled by authors from Badan Pusat Statistik (<http://dds.bps.go.id/eng/index.php>), 2010

The tourism industry and handicraft production in Yogyakarta are suffering from the lack of infrastructure, which inhibits a rapid global promotion of those sectors. Indeed, important factors, such as online business promotion and suitable roads may be missing to secure the related business. According to the Department of Culture and Tourism, the handicraft centers, such as those in Bali and Yogyakarta, have important links to tourist itineraries in Indonesia, but unfortunately, they do not yet receive the attention they need, especially from local governments. Furthermore, clusters or cooperatives need more support from the local government in order to promote their products worldwide via such vehicles as websites and the internet.

2. Research Objectives

- Identify the binding constraints and opportunities for enhancing efficiency in the Batik production.
- Analyze the linkages among stakeholders for encouraging global promotion of Yogyakarta through Batik and the tourism industry.

3. Research Questions

- What are the value chain constraints in the production process of Batik handicrafts?
- What are the perceived opportunities for enhancing efficiency in the production of Batik handicrafts?

- What are the existing linkages between Batik and tourism?
- How do stakeholders collaborate to promote Yogyakarta through Batik and the tourism industry on the global market?

4. Literature Review

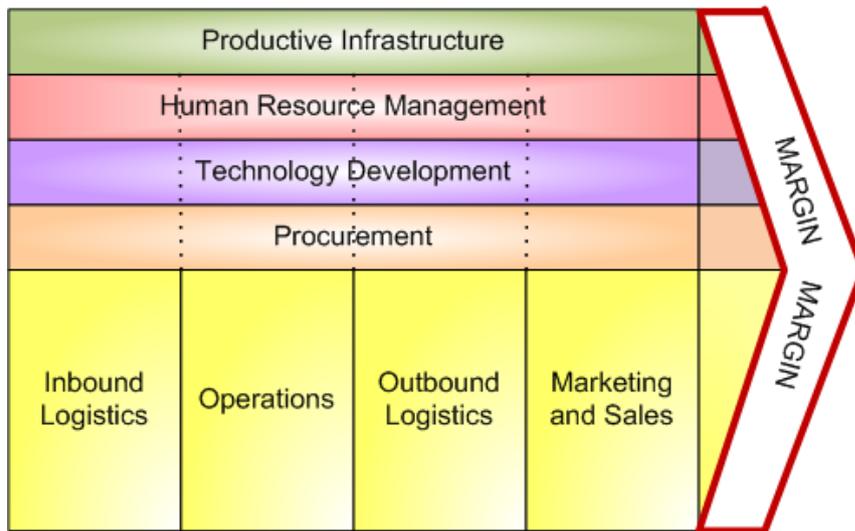
4.1. Value Chain Framework

Every firm is a collection of activities that are performed to design, produce, market, deliver and support its product. All these activities can be represented using a Value Chain Framework.² This approach was first described and popularized by Michael Porter in 1985. As an analytical framework, it describes how products pass through all activities of the chain in order and at each stage the product gains some value. The chain of activities gives the products more added value than the sum of the added values of all activities. In this context, it is important not to confuse the concept of the value chain with the costs occurring throughout the activities. The final of this analysis is to identify specific areas in which the firm can increase efficiency and offer the customer a higher level of value that exceeds the cost of the activities, therefore resulting in a profit margin.

In Figure 1, the value chain has been adjusted to the Batik handicraft case. The main difference with Porter's original model is that in the case of Batik, there are not additional services (such as maintenance) after the product is sold. The "primary activities" include: inbound logistics, operations (production), outbound logistics, marketing and sales (demand). The "support activities" include: administrative infrastructure management, human resource management, information technology, and procurement.

² Note that for this research, the "firm value chain" approach, which is focused on individual productive units. This concept is more limited when compared to more aggregate systems such as "industrial value" and/or "global value chain".

Figure 1: The Value Chain of Batik Production



Source: Based on Michael Porter (2008)

<Primary Activities>

● **Inbound Logistics**

Inbound Logistics, which is the first category in primary activities, are “activities associated with receiving, storing, and disseminating inputs to the product, such as material handling, warehousing, inventory control, vehicle scheduling, and returns to suppliers” (Porter, 1985, p.39).

● **Operations**

Operations, which is the second category in primary activities, are “activities associated with transforming inputs into the final product form, such as machining, packaging, assembly, equipment maintenance, testing, printing, and facility operations” (Porter, 1985, p.40).

● **Outbound Logistics**

Outbound logistics, which is the third category in primary activities, is a very important part of the supply chain process. After operations, a firm has to deliver their products to the market. Michael Porter defines Outbound Logistics as “activities associated with collecting, storing, and physically distributing the product to buyers, such as finished goods warehousing, material handling, delivery vehicle operation, order processing, and scheduling.”

● **Marketing and Sales**

Marketing and Sales is the fourth category in primary activities. Michael Porter defines Marketing and Sales as “activities associated with providing a means by which buyers can purchase the product and inducing them to do so, such as advertising, promotion, sales force,

quoting, channel selection, channel relations, and pricing.”

<Support Activities>

● **Productive Infrastructure**

In the context of the value chain, the infrastructure represents supportive activities such as: general management, planning, finance, accounting, legal procedures, government affairs and quality of management. As the other supportive activities, infrastructure supports the entire chain and not only individual stages of the chain. In the case of Batik handicrafts, infrastructure can be a power source of performance, for example, proper management information systems can contribute significantly to marketing and sales. In addition, good quality management can drastically affect inbound, production and outbound logistics, in terms of reducing wasted time, preventing problems, and evaluating new and more efficient methods of provision, production and distribution.

● **Human Resource Management**

Human resource management consists of “activities involved in the recruiting, hiring, training, development, and compensation of all types of personnel” (Porter, 1985, p.42). In Batik production, there are not only crafters but also people in charge of material handling, transportation, marketing and sales. There should be different skills required in each line of work. In order to keep the quality and compete with different Batik firms, it is very important for them to enhance human resources through strategically recruiting, hiring, training, and providing proper working conditions to workers.

● **Technology development**

In the value generation process, every activity embodies technology, typically in terms of “know how,” procedures or technology embodied in equipments. The variety of technologies employed in most firms is very broad, ranging from those technologies used in preparing documents and transporting goods to those technologies embodied in the product itself. In addition, most value activities combine different sub technologies involving different disciplines such as metallurgy, electronics, mechanics and others. In the context of Batik handicraft firms, technology development mainly represents those activities that aim to improve and actualize the product and the processes. It is important to mention that technology is not solely linked to the production process, but also takes many forms, from basic research and product design, to media research, equipment design and sales procedures.

● **Procurement**

Procurement means “the function of purchasing inputs used in the firm’s value chain.”

Procurement does not mean only purchased inputs for inbound logistics, but includes all the purchases throughout the Primary activities. For example, in the case of Batik production, procurement includes all the costs of materials, tools, machines, electricity, water, transportation, marketing, wages, etc. Although it is obvious that materials and wages are the most costly expenditures, it is important for managers to take other costs into account in order to efficiently save costs of their business.

4.2. A Framework of Linkages for Global Promotion

Tourism industry is perceived by many developing countries as an impetus for economic growth for the simple reason that it has important direct and indirect impacts on many other economic sectors. Due to the nature of its linkages, the tourism industry has become a catalyst for national and regional development in terms of bringing employment and reducing inequality, exchange earnings, balance of payments advantages and important infrastructure developments. Tourism linkages with other economic sectors refer to the situation where goods and services used by the tourism industry are produced domestically. There are two types of linkages: forward and backward linkages. Backward linkages measure the (demand) stimuli given to supplying sectors as a result of increased demand by sector j . Forward linkages measure the (supply) stimuli given to user sectors as a result of an increase in the output of the supplying sector.

Linkages can be defined as the network of inter-sectoral supply relationships between the tourism economy and the rest of the productive sectors of the domestic economy. When linkages exist between the tourism economy and the rest of the economic activities of the economy, it is easier for local entrepreneurs to collect the signals from tourism demand and to achieve higher cost savings. The more linkages exist between tourism and the general economy, the more innovative the tourism cluster will be (Oreyalan 2001; Mytelka and Farinelli, 2000; Porter 2008).

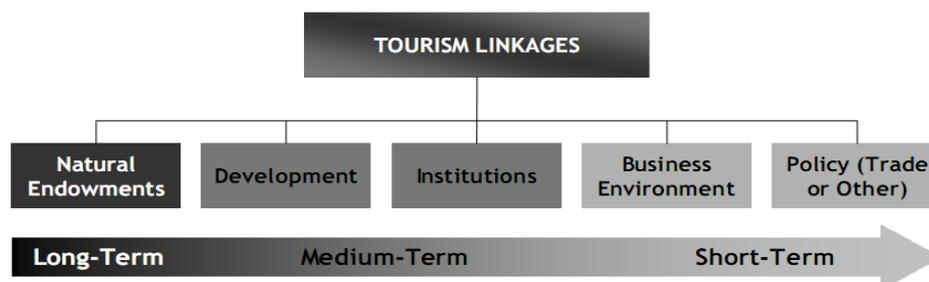
The available literature on measuring tourism linkages has been dominated by the usage of information from national, regional, or local level to compute tourism linkage multipliers. The widely used indicators are backward linkages and forward linkages but several techniques have been applied so far. Using the Hawaii 1987 input-output table, Junning Cai, PingSun Leung, and James Mak computed as Leontief supply-driven multiplier as a backward linkage measure and the Ghosh supply-driven multiplier as the corresponding forward linkage measure. Their results suggested that tourism in Hawaii has about average backward linkages and below average

forward linkages. On the same line, Josaphat Kweka, Oliver Morrissey and Adam Blake carried out linkage analysis to examine the interdependence between tourism and other sectors in Tanzania. Their main finding has shown that tourism has a significant impact on output and this importance lies mainly in its inter-sector linkages. They also conclude that in case of Tanzania, the most important sectors for tourism output impacts are food and beverages, fishing and hunting, staple food and the wholesale and retail trade.

Although these models can generate multipliers for linkages analysis, they have some weakness and practical limitations. Some of the most criticisms made to these models were that their assumptions are very restrictive. This developed an interest in the usage of the Social Matrix Account (SAM) and later on the Computable General Equilibrium Models (CGE) for the linkages analysis. In his paper on linkages between tourism and the agricultural sector in Bali-Indonesia, a social accounting matrix approach, Made Antara (1999) concludes that the tourism sector, in terms of tourists' expenditures, has a strong linkage with local economic sectors, mainly the agricultural sector.

Conversely to the previous studies, this research will use a holistic approach to analyze the level of linkage between tourism and the handicraft industry and to assess the constraints and opportunities to strengthen linkages between the two for the global promotion of Yogyakarta. Indeed, the level of linkages between tourism and the handicraft industry depends on many factors, as depicted in the Figure 2. Those factors are natural endowments, level of socio-economic development, institutions, business environment, and policies (e.g., trade). These domains, in turn, can be conceptualized hierarchically in terms of their relative amenability to public policy over the long, medium, or short terms.

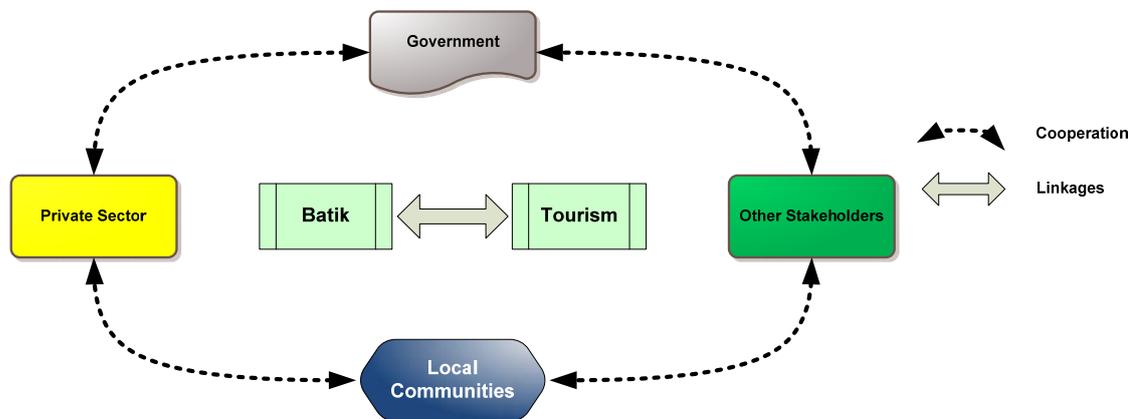
Figure 2: Determinant of tourism linkages



Source: Izaskun Lejarraja & Peter Walkenhorst, 2007.

As far as Yogyakarta is concerned, it is useful to centre our analysis on institutions, given the role of institutions as a fundamental cause of economic development. Douglass North (1990) defines institutions as, “the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction.” Following this definition and in a broader way, institutions incorporate many aspects of economics and the political and social organization of society. In Yogyakarta, the Yogyakarta Declaration on Cultural Tourism, Local Communities and Poverty Alleviation identified four institutions capable to promote it as a city of culture in Indonesia: the government, the private sector, the local communities and other stakeholders. Thus, the linkage between tourism and the handicraft industry and the way the actors can cooperate to enhance this linkage and induce the global promotion of Yogyakarta, can be visualized within this conceptual framework (Figure 3).

Figure 3: Conceptual framework of Global promotion of Yogyakarta through Batik and tourism industry



Source: Authors

The starting point of this framework is in identifying the intersection between Batik and the tourism industry. Obviously, it's the handicraft by itself. Handicrafts, as a final product of the handicraft industry are supplied to the tourism industry. The tourism industry serves here as a market for handicrafts because sale of handicrafts to tourists can foster the continuity of local traditions and contribute significantly to poverty alleviation, through its ability to create jobs, socio-economic opportunities, and an enhanced quality of life in local communities. Here, the global promotion framework completes the value chain of the handicraft industry to the extent

that the latter deals with the production technologies and design aspects, along with the financial and management aspects of production, whereas the first focus is on policies coordination, marketing channels and methods for optimizing the sale of handicrafts to tourists and promoting Yogyakarta.

① **Government:** The government's important role in promoting tourism is to set policy and legislative frameworks in terms of regulating the tourism industry (legislation, regulation, rules and licensing; land-use planning and development control), inducing its expansion (pricing, charges and taxation; property rights and trading; financial incentives), and sustaining its development (infrastructure provision and management, capacity-building, and marketing and information services). This involves the participation of tourism ministries and tourism planners, not only for administrative purposes, but for coordinating, networking and getting support from other ministries in terms of inter-ministry administration. The functions of tourism ministries should therefore go beyond regulating the tourism businesses, marketing and promotion, and include wider consultation and coordination.

In Yogyakarta, the government roles are defined as follows:

- Encourage the participation of all relevant stakeholders, including local communities, civil society, nongovernmental organizations and the private sector, in all stages of cultural tourism development from planning, implementation, monitoring, evaluation, and distribution of benefits
- Allocate sufficient financial and human resources for the protection, conservation and interpretation of local cultural heritage, intangible and tangible, both by allocating to them a significant proportion of tourism-related taxes and by charging reasonable but fair entrance fees to sites and performances
- Provide education and training opportunities for policy makers, planners, researchers, interpreters, conservators, tourism operators and local communities to enhance their skills and capacity in cultural tourism management, as well as their awareness regarding the potential of cultural tourism to contribute to poverty alleviation
- Develop a clear strategy for cultural tourism development in any area designated as a tourist destination in consultation with all relevant stakeholders
- Provide the necessary resources to monitor and evaluate the results of cultural tourism development, especially those with a poverty reduction emphasis

- Provide the necessary technical, financial, market information and promotional support to the less favored segments of local communities at cultural tourism destinations to allow them to set up sustainable tourism related businesses and generally benefit from the inflow of tourists
- Help local tourism suppliers and incoming tour operators in the selection of marketing channels for their products and services in order to ensure a fair distribution of benefits between local providers and foreign operators

② **Private sector:** The private sector, as an agent, has an important role to play in tourism promotion because of the expertise in different market segments and customer handling services. As for the definition of private sector, it is considered to be tour agencies, hotels, restaurant and shops. For Batik, hotels and restaurants are the first places that tourists visit. Most of them are decorated with local products, which generate tourist attractions. Tourists can see the handicrafts and desire to know more about them. Thus, a relationship between the two products develops because handicrafts may attract tourism and tourism supplies the potential clients for handicrafts.

In the context of promoting Yogyakarta, the private sector has to:

- Foster partnerships with the local communities in the development of tourism and culture to maximize the local economy derived from cultural tourism
- Give first priority to local communities in the recruitment of human resources, with an emphasis on providing training in order to allow local people to become a part of the tourism economy
- Promote the significance of the local cultures, while protecting their characteristics and respecting the carrying capacity of both intangible and tangible heritage
- Give priority to local suppliers of goods and services in order to create jobs and nurture the sustainability of traditional arts and crafts

③ **Local communities:** This category includes agents such as individual crafters and cooperatives. Their key roles are to:

- Take an active and organized role in the tourism planning and monitoring process

- Through the creation of community based capacity building initiatives, enhance the knowledge and skill levels in order to ensure their active participation in the tourism industry
- Maintain cultural values and living traditions through education programs, research and conservation activities
- In order to ensure the equitable distribution of the benefits of cultural tourism, use innovative community-based initiatives such as cooperatives and development corporations
- Use festivals and other events to position the cultural tourism potential of their communities
- Work actively with the private sector in order to ensure responsible development that benefits local people and companies

④ **Other shareholders:** The other shareholders are NGOs, development agencies, academic institutions and the media. Their role is respectively:

- The NGOs should work with the local communities by helping them to achieve their economic and cultural goals and objectives, through the use of technical advice and financial support
- Development agencies must recognize the potential of cultural tourism as a major tool for poverty alleviation and design their assistance programs to support this important area of development activities
- Academic institutions should include research and education activities related to cultural tourism and poverty alleviation
- The national and international media should promote a comprehensive and truthful picture of cultural tourism

5. Methodology

GENERAL OBJECTIVE	OBJECT OF STUDY	RESEARCH ITEMS	RESEARCH INSTRUMENT	INTERVIEWEE	SITE
Efficient production of Batik Handicrafts	Local Producer Value Chain	Firm Infrastructure	Semi-structured Questionnaire	Batik Firms: <ul style="list-style-type: none"> • Batik Topo • Batik Topo's daughter • Batik Nining • Batik Dirjo • Batik Sri • Batik Sekar Arum 	Wijirejo Village Wukisari Village
		Human Resources			
		Technology and Design			
		Procurement			
		Inbound Logistics			
		Operations			
		Outbound Logistics			
Marketing and Sales					
Enhance linkage between Batik Handicrafts and tourism	Institutions and coordination	Pro Handicraft Tourism policies	In-depth interview	Provincial government: <ul style="list-style-type: none"> • DIY Province Office Local government: <ul style="list-style-type: none"> • Bantul Regency Office • Tourism office of Bantul District • Board of Batik and Craft 	Yogyakarta city and Bantul District
		Partnerships		<ul style="list-style-type: none"> • Batik shop: Margaria • Batik Club (Paguyuan Sekar Jagad) • Batik Union (PPBW) • Tourism Agency (Sweety) • Hotel (Santika Hotel) 	Yogyakarta city and Wijirejo Village
		Marketing and promotion		<ul style="list-style-type: none"> • Restaurant (Gadri Resto) • Journalist (Kedau Rakyat) Street vendors in Malioboro Street	Yogyakarta city
				<ul style="list-style-type: none"> • Development Agency GTZ 	Wijirejo Village

Source: The authors based on the information provided by Gadjah Mada University

5.1 Selection of Interviewees

The interviewees are all engaged in or connected with Batik and the tourism industry in Yogyakarta. Among several Batik production areas in Yogyakarta, Bantul District was selected as the research site because Bantul District is famous for hand-made Batik, such as handwritten and stamped Batik. These products are sold in Yogyakarta City, other places in Indonesia and also foreign countries through traders. Since it was difficult to visit all Batik firms in Bantul due to time constrain, six major firms in Wijirejo Village and Wukisari Village were selected for semi-structured questionnaires to investigate Objective 1.

As for Objectives 2 and 3, governmental institutions such as the DIY Province Office, Bantul Regency Office and the Tourism Office of Bantul District were selected to understand policies and coordination at both provincial and district levels. Board of Batik and Craft is also a central government institution within the Ministry of Industry, which takes an important role in research and development of Batik production technology and also skill training of Batik producers. The Batik Union, PPBW (Paguyban Pengrajin Batik Wijirejo), is organized by the Batik producers in Wijirejo Village for sharing information and techniques. This union was useful for understanding how Batik producers support each other at the village level for achieving better production and promotion. A Batik club called Paguyuan Sekar Jagad was also useful to know how to organize self-promotion activities of Batik. Among several international organizations which work for handicraft production or promotion, GTZ was selected because they had assistance projects focusing on Batik firms which were damaged by the earthquake in Wijirejo Village in Bantul. Other interviewees, such as the Batik shop Margaria, tourism agency Sweety, Santika Hotel, street vendors and the restaurant Gadri Resto are all engaged in business activities that are strongly related to Batik.

6. Results: Objective 1

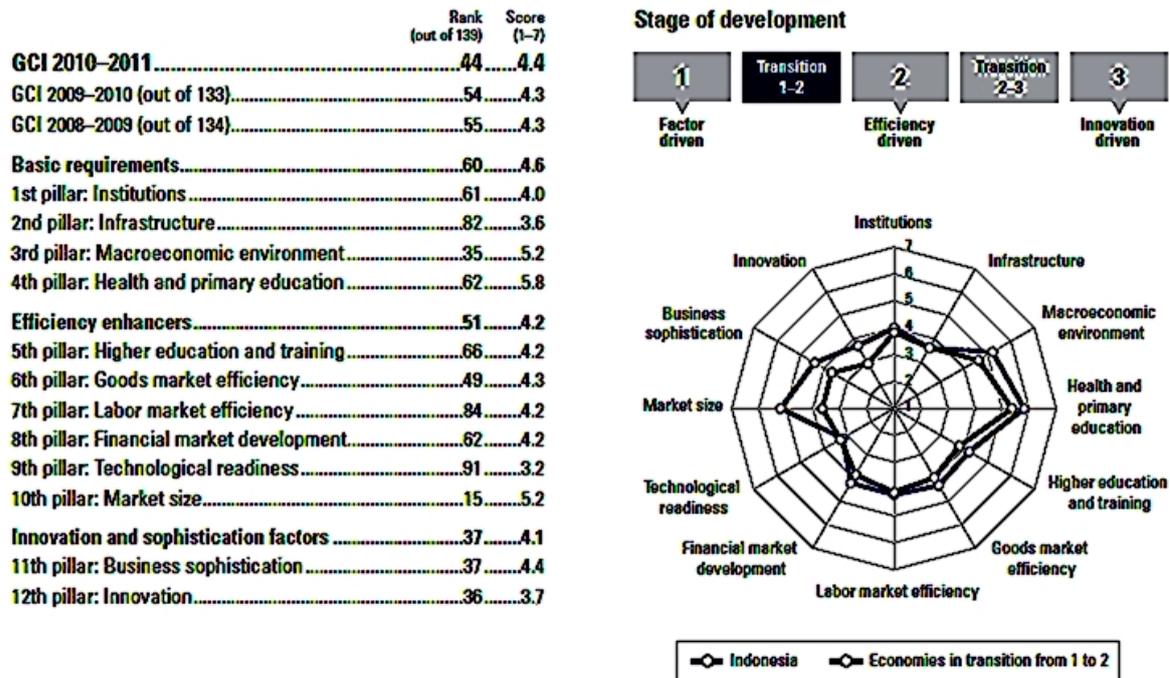
6.1 Why efficiency is important for Indonesia and Yogyakarta

Generally “efficiency” is defined as the capacity to produce the most output with the least input. This implies that scarce resources are allocated in the best way possible in order to obtain more output, which in turn, generates higher income for the producer. In addition, it is also known that higher efficiency implies higher productivity. Within this context, the current theoretical and empirical literature highlights that productivity is the main determinant of

economic growth and development. Furthermore, if an economy operates more efficiently, its level of local and global competitiveness is higher. As a result, it can be stated that efficiency and competitiveness are closely related elements in determining the level of economic performance and development of a firm, an industry and a nation.

Every year the World Economic Forum publishes its famous Global Competitiveness Report in which the nature of competitiveness is defined as, “the set of institutions, policies, and factors that determine the level of efficiency and productivity of a country.” Following this definition the this international organization elaborates an index which may be used to understand the current development stage of 139 countries and the areas in which there is space for improvement and policy action.

Figure 4: Global Competitiveness Index: Indonesia



Source: Global Competitiveness Report 2010

Figure 4 presents the situation of Indonesia in terms of its global competitiveness. It can be observed that Indonesia is in the transition stage from being a “factor driven” economy towards an “efficiency driven” economy. This transition point is very important because when an economic unit upgrades its level of competitiveness, the productive inputs (labor and capital) receive a higher compensation for their contribution to the final product. This means that more and better jobs can be created and also that salaries can be increased due to efficiency

improvements. The final goal of this transition period indicates that Indonesia is becoming an economy that will need to apply efficiency-based strategies for enhancing its current level of development. In order to do so, there are six areas in which efforts should be focused: (1) higher education and training; (2) goods market efficiency; (3) labor market efficiency; (4) access to finance; (5) technological readiness; and (6) market size. These so called “Efficiency Enhancers” are also central elements of the Value Chain Framework, utilized in this study. Their application, following a micro view of case studies, will be explained in the following sections.

So far, based on the Global Competitiveness Report, it can be justified or at least arguable that efficiency is very important for Indonesia’s economic performance and development. In addition, from a micro point of view, the efficiency of some Batik producers in Yogyakarta can be analyzed through a simple exercise of calculating the output-input (labor) ratios of three comparable³ Batik producers.

Table 3: Measuring Efficiency in Yogyakarta: The Output-Input Ratio approximation

PRODUCER	OUTPUT	LABOR-INPUT	EFFICIENCY
A	15850	18	881
B	15850	20	793
C	15850	25	634

Source: Based on the authors’ fieldwork interviews

Table 3 shows different levels of efficiency calculated based on the information provided by producers. The annual output is measured in meters of cloth (mainly stamped Batik) and the input in number of workers. Given the comparable scale of the three producers,⁴ it can be said that the Firm A is the most efficient of this sample because one unit of labor produces an average of 881 units of output in one year. On the other hand, Firm C produces only 634 units of output. This also implies that the most efficient firm produces 1.4 times more when compared with least efficient one. Although this is a simple approximation to measure efficiency, it is still informative for indentifying that in Yogyakarta there exists different levels of efficiency in the production of Batik. The next step is to analyze the sources of these differences through the

³ The producers are comparable in terms of the variety of Batik types (handmade, stamped and printed), complexity of the designs (motives), number of colors, and size of the final product.

⁴ During the interviews, these three producers reported the same total production. This coincidence is very helpful for comparing efficiency more easily.

value chain framework. However, as in intermediate step it is necessary to understand more deeply the activities, decisions, organizational practices and other elements that constitute the Batik production process, this is the central topic of the next section.

6.2 Batik Production Process

6.2.1 General Graph-7 Steps:

Basically the Batik production process has seven steps. First, Batik producers draw sketches on white cambric or silk by pencil. Second, they draw with wax (chanting) or copper stamping. Chanting itself is a kind of pencil used to draw with wax. In this report, the term of “chanting” is used to refer to the waxing process. The term of copper stamping means waxing process using a copper stamp. The third step is coloring, in which producers dip the cambric (or silk) into the dye bath. There are two types of dye baths, natural and chemical. Forth, if producers want to add another color, they carefully scrape the wax where they want to add another color and dip the cambric (silk) into the dye bath using the same process. During the fifth step, producers remove the wax using hot water. Sixth, the producers dry the cambric (or silk) and then iron it using a pressing roll for those that will be sold in salons. Finally, the producers package it.

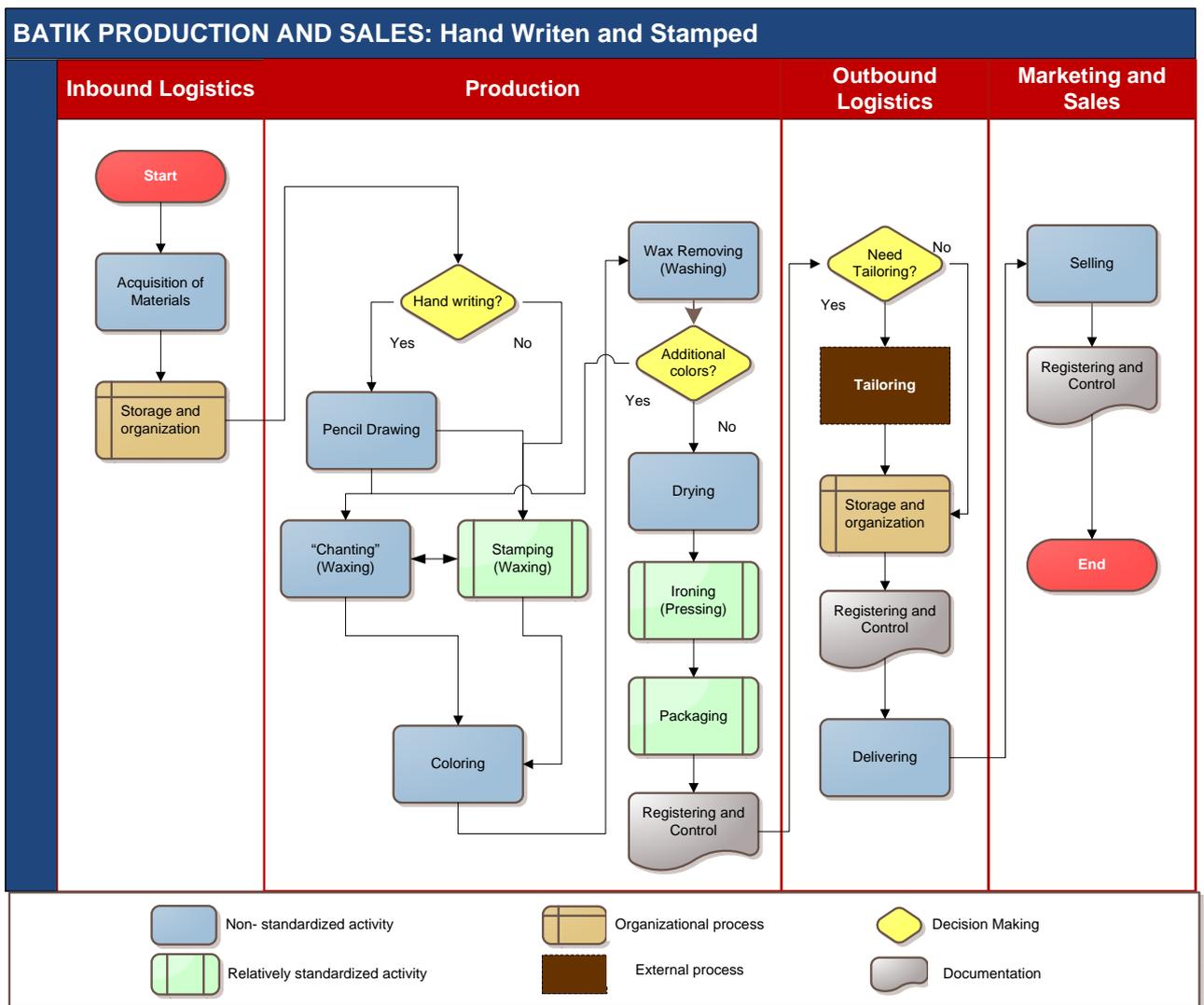
The Batik production process can be different depending on whether producers use chanting, copper stamping, or a combination of the two. This combination type is called (kombinasi). The three different styles have different values. Chanting Batik is the most expensive among three due to the long process and high level of skill required. The thickness of the wax line is also slightly different with a variety of size and shapes of the wax line. This uniqueness adds a value on the chanting Batik. Copper stamp Batik is the cheapest. Copper stamping leads to different levels of thickness, size and shape of the wax line. Additionally, the process is much faster compared to chanting production. Finally, combination Batik reflects a middle price. Firstly, the waxing is drawn using copper stamping, then the Batik producers add detailed design by chanting.

6.2.2 Specific examples

Even though each Batik producer has a different style when producing Batik, introducing and comparing their processes is important for understanding common elements in which efficiency can be enhanced through standardization of best practices. In addition, this comparison can be useful for understanding the uniqueness and value proposition of each Batik producer. More details on the source of the value proposition, and constraints and opportunities

for enhancing efficiency are described in the next section. This paragraph's aim is to understand more deeply the Batik production process through the construction of a flowchart. Generally, a flowchart is a useful diagram, which shows the visual productive process. The process is shown through different boxes, shapes and arrows and is helpful to understand the standardized and non- standardized activities, organizational procedures, documentation, decisions to be taken and external processes.

Figure 5: Batik production and sales



Source: The authors based on observation and interviews

Activities (Non-Standardized): Acquisition of Materials, Pencil Drawing, Chanting, Coloring, Wax Removing, Drying, Delivering, Selling

The notion of a non-standardized activity in this study highlights the fact that during observation of the whole Batik production process, there were some activities, which showed a relatively lower level of standardization (automation) than others. Specifically, they are: acquisition of materials, pencil drawing, chanting, coloring, wax removing, drying, delivering and selling. The following explanation is about activities of acquisition of materials, delivering and selling, which were not explained in the above paragraph on the seven steps.⁵

Acquisition of materials is the activity of buying raw materials like cambric or silk. In addition, Batik producers may have to buy wax and chemical or natural dyes. Batik producers buy these materials and tools from different suppliers and store them in warehouses at their work place. However, producers tend to use recycled wax and so may not have to buy it so often. Moreover, in terms of natural dyes, producers may not have to purchase them if they grow specific plants that are ingredients for the homemade creation of natural dye. Delivering is the activity of transporting Batik to the market. Transportation by bicycle or public transportation, such as the bus, are the main modes. Usually, producers have small-scale Batik factories adjacent to the shop in which they sell their products. The Batik can be sold as a plain cloth in this adjacent store (salon sales) and/or can be tailored and sold as a dress. In addition, the stores also sell Batik produced by other firms and through this, merchants can increase the variety of models, designs and styles to be sold in the store.

Predefined (standardized) Activity: Stamping, Ironing, Packaging

The notion of a predefined activity in this study highlights the fact that during observation of the whole Batik production process, there were some activities, which showed a relatively higher level of standardization (automation) than others. Specifically, those activities are stamping, ironing and packaging. Stamping is an activity to draw wax with a copper stamp. Ironing is an activity to press Batik using a pressing machine. The ironing process is very important for the salon sales. Packaging is an activity to cover salon or Batik shirts with plastic or paper.

Organizational Process: torage and organization (Inbound Logistics), Storage and organization (Outbound Logistics)

The notion of an organizational process in this study highlights the fact that during the

⁵ These activities, specifically Acquisition of Materials, are suffered by the economic crisis that occurred in late 1997. The price of exported chemical dyes and silk has been rising since the crisis, and the price of domestic cotton is also rising because of production decrease (小池, 1998, p98-p.99).

observation of the whole Batik production process, there were some activities in which it was necessary to systematically organize the inputs from the outputs. Specifically, there are input storage and organization, and output storage and organization. Storage and organization (Inbound Logistics) is the process of storing raw materials and tools. Storage and organization (Outbound Logistic) is the process of storing Batik as plain cloth or tailored dresses.

Document: Registering and Control

The notion of a documenting activity in this study highlights the fact that during observation of the whole Batik production process, there were documents used to register specific tasks and also those that served as information sources for decision making, specifically registering and control of the final output.

In the process, the first documentation refers to the counting of units of plain cloth that have been produced and what color they are. The second documentation refers to counting how many units of tailored dresses have been produced, while the third documentation refers to keeping track of the price and value of every item that has been sold.

Decision activities: Handmade decision, Additional colors decision, Need Tailoring decision

The notion of a decision activity in this study highlights the fact that during observation of the whole Batik production process, the producers had to make concrete decisions that affect the effectiveness and efficiency of the process. Specially, these activities are the decisions of handmade production, additional colors and tailoring. Handmade decision refers to whether the producer selects chanting wax or copper stamping for drawing the wax. The additional colors decision refers to whether or not producers add another color. Finally, the tailoring decision refers to whether producers sell their Batik as a plain cloth or tailored clothing.

External Process/activities: Tailoring

The notion of an external process/activity in this study highlights the fact that during the observation of the whole Batik production process, there were some activities that were not being accomplished within the boundaries of the firm, specifically the process of tailoring, which was usually handled at a location near the Batik firm. Generally, the producer and the tailor know each other well and the service is reliable because of confidence and trust established among the villagers that act as a mechanism for enforcing verbal contracts. Moreover, this confidence and trust may bring information about trends in the city and preferences of tourists for the ability to update and promote products. Market places for selling the handicraft products are located in the city of Yogyakarta, especially in hotels, souvenir shops,

street shops, restaurants and also in sightseeing places such as the Borobudur Temple Compounds. Therefore, handicraft firms need to have connections with sellers in those market places, which utilize confidence and trust.

6.3 Value Chain Framework

Every firm has its own value proposition in its business activities and is expected to offer value that is attractive for potential customers in order to gain profit and get ahead of the competition. This value proposition can be applied to hand-made Batik production in Yogyakarta. Although most of the Batik firms in Yogyakarta are traditional cottage industries, the Batik market has been bigger and more competitive in meeting the increasing demand from inside and outside Indonesia. In identifying and analyzing the value proposition of each Batik firm, the Value Chain Framework can be a useful tool to find unique qualities and determine constraints and opportunities in the value proposition among the interconnected activities (Figure 1).

6.3.1 Value Proposition in the process of Batik production (in Bantul)

Bantul District is one of the major regions in Yogyakarta that produces Batik, with approximately 440 registered Batik firms. Value propositions were examined by conducting observation and interviews with five major Batik firms (Batik Topo, Batik Topo's daughter, Batik Nining, Batik Dirjo, Batik Sri) in Wijirejo Village and 1 firm (Batik Sekar Arum) in Wukisari Village.

Table 4: General Information of 6 Batik firms

	Establishment	Types of Batik products	Production (Units/Month)	No. of Employees
Batik Topo	1981	Hand-written/Stamped/Printed	15850	35
Batik Topo's daughter	2007	Stamped	38040	17
Batik Nining	2000	Hand-written/Stamped/Printed	15850	20
Batik Dirjo	1968	Hand-written/Stamped/Printed	15850	18
Batik Sri	1996	Hand-written/Stamped	NA	10

Batik Sekar Arum	2007	Hand-written	420	35
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Source: Based on the interviews conducted by authors in 2010

As a result of the field research, which examined these 6 Batik firms, value propositions were found in the quality of materials and tools, design, color, price and service.

- **Materials and tools:** The materials for producing Batik are cotton, wax and color dyes. What makes Batik unique is the use of wax in making motifs. Wax is applied on cotton by using special tools called chanting and metal stamps, leaving the part of the cloth where wax is placed white after dyeing. In order to completely prevent the color from running during the dyeing process, the manager of “Batik Dirjo” uses expensive beeswax instead of paraffin wax.
- **Design:** Motifs of Batik are different for each Batik firm and uniqueness and complexity of motifs are points of attraction for customers. Customers can also request their favorite motifs and buy customized Batik cloth. “Batik Sekar Arum” in Wukisari Village produces only handwritten Batik and the motifs are creative and complex. On the other hand, “Batik Dirjo” and “Batik Topo’s Daughter” have an advantage in offering many varieties of stamped Batik, which is suitable for school and company uniforms.
- **Color:** A wide variety of color can be made in Batik by mixing different chemical color dyes. There are also natural dyes, which have softer color tones than chemical dyes. Customers can customize their colors if they pay additional money for customization.
- **Price:** Price is set based on the cost of materials and amount of time for production. The price of products with complex motifs, different colors or natural colors is higher than one-colored products with simple motifs because it takes a considerable amount of time and skill to produce. However, the average price of products sold inside the firm shops is cheaper than those that are sold in the city of Yogyakarta. Local customers who were buying at “Batik Topo” said that they came to buy direct because the quality is good but the price is cheaper.
- **Service:** All the six Batik firms, except for Topo’s Daughter have their own shops and sell their own products. They sell not only pieces of Batik cloth, but also shirts and dresses that are made by tailors in the neighborhood. “Batik Dirjo” provides a discount service when customers make a bulk purchase. “Batik Sekar Arum” has a direct connection with the tourism sector by providing Batik making workshops for tourists.

6.3.2 Constrains and opportunities in the Batik production process

Throughout interviews with the six Batik firms in Bantul District, constraints and opportunities for enhancing efficiency are found in each activity of the Value Chain Framework.

<Primary Activities>

① Inbound Logistics

Constraint:

- **Price fluctuations in cotton**

The price of materials such as cotton and wax is not stable but fluctuating according to economic conditions and demand. Since the demand for materials is increasing, Batik firms have difficulty in acquiring materials, especially white cotton in the markets of Yogyakarta City (KOMPAS, 2010).

Opportunity:

- **Recycling wax**

Wax was once disposed after being used, however it is now recycled in all Batik firms. The cost for purchasing wax was reduced and recycling wax is good for environment.

- **Solidarity of association**

Although the Batik firms in Wijirejo Village buy materials individually at traditional markets in Yogyakarta City, “Batik Sekar Arum” buys some materials from Batik associations in Wukisari village. Purchasing through the association can save time and cost. There is also a big storage warehouse shared by the association members enabling “Batik Sekar Arum” to use it when their own storage space runs out.

② Operations

Constraint:

- **Standardization of color**

In the production of custom-made Batik, color mismatch is a common problem for every Batik firm. Even though they standardize the time of dyeing and composition of chemical dye powder, subtle differences of color can happen because of differences in temperature and humidity. Customers sometimes decline to buy the products because of color mismatch, leaving owners with only the down payment, which is approximately 10%-30% of the entire price. Since custom-made products usually have original motifs or marks, it is rather difficult for owners to resell returned ones to other customers.

- **Trade-off: Natural or Chemical dye**

Waste management is becoming a serious environmental issue in Batik production because many of Batik firms in the rural areas dispose of the chemical dye residue directly into the local rivers. The local government and Board of Batik and Craft have been encouraging Batik firms to use natural dyes, however, making natural colored Batik takes 3 or 4 times longer than chemically colored Batik. The manager of “Batik Topo” says, that although foreign customers tend to prefer natural color, a majority of local customers like to wear chemical dyed Batik because these colors are more vivid and less expensive. Considering the amount of time and needs of the customers, it will not be easy for Batik firms to entirely switch from chemical to natural dye.

③ **Outbound Logistics**

Constraint:

- **Variety in the delivery system**

There are several ways to deliver finished products to customers and exhibitions, including mailing service, car, public bus and motorbike. Batik firms decide delivery methods according to the distance and delivery date. Inefficiency results from a lack of standardized logistic systems, which requires firms to arrange a method and vehicle for delivery every time.

Opportunity:

- **Associations**

Since many Batik firms belong to Batik associations, it is more efficient to collect members' products and deliver through associations rather than sending individually. It might take time to establish logistic systems and rules for the association, but beneficial in the long run because the firms can reduce the cost and time of delivery.

④ **Marketing and Sales**

Constraint:

- **Customization**

A common marketing constrain for the Batik firms that produce stamped Batik is the customization of designs requiring a variety of stamps in order to make attractive motifs. Lack of capital for investment, frequently prevents the purchase of expensive stamps.

Opportunity:

- **Government policies**

From the time Batik was recognized by UNESCO as an Indonesian cultural heritage in 2008, the government set policies for promoting Batik. One of the policies encourages all civil servants to wear Batik uniforms on Thursday and Friday. Schools and private companies such as

hotels, also follow the policy (Bantul Regency Office, 2010). The domestic demand for Batik has therefore been increasing.

- **Exhibitions**

Main customers of the Batik firms in Wijirejo Village are people who live in or near the village. Those firms depend on local reputation and are likely to be passive in promotional activities because products are mostly sold at their shops. However, “Batik Sekar Arum” sends their products to Batik exhibitions held in hotels and big shops in Yogyakarta City. The manager was able to meet potential customers in past exhibitions. Since most Batik firm managers are not familiar with advertising via technologic media such as websites, participating in exhibitions is an effective way for promoting their products outside villages.

<Support Activities>

⑤ **Financial, Managerial and Physical Infrastructure**

Constraint:

- **Planning and control management**

Most Batik firms run their businesses in traditional ways and don't use financial statement such as balance sheets. For example, the manager of “Batik Dirjo” keeps the record of only the amount of sales. However, the manager of “Batik Sekar Arum” has basic financial management knowledge and keeps a record of payment, sales, profits and also inventories. Although it is not necessary for Batik firms to make professional financial documents, it is still useful to acquire basic financial management knowledge in order to be more aware of costs and benefits.

Constraint:

- **Investment capital**

Many of the Batik firms perceive lack of capital as their problem. They have been recovering from damage from the earthquake that occurred in 2006 by receiving financial support from the local government and GTZ. However, their investment capital is not enough to buy new stamps and other equipment.

- **Variability of health conditions**

Most of the Batik firms are cottages inside or next to the managers' houses and workers who live in the neighborhood come to work there everyday. The working environment of the cottages is poor because inside is hot and filled with the smell of heated wax and petroleum liquid. Workers in charge of stamping stand for many hours in limited space. When considering the health conditions of the workers, it is necessary to improve working conditions by providing

ventilation and repairing buildings.

⑥ **Human Resources**

Constraint:

● **Technical training**

Many of the Batik firm managers perceive technical training as one of the big challenges due to the skill gap between young and experienced workers. Batik Topo's daughter is afraid of excessive customized Batik orders because there is not enough experienced workers who can create complex motifs. She also said that customers want original motifs but it is sometimes hard to perfectly meet their needs. Managers and skillful workers teach their skills to young workers, however, it still takes several years to equip them with strong skills.

● **Export training**

Batik has become globally known since UNESCO registered it as an Indonesian cultural heritage, and many of the Batik managers have a desire to sell their products outside Indonesia. However, they do not know how to promote and export their products because they do not have opportunities to receive export training from the Ministry of Commerce and Industry.

Opportunity:

● **Experience**

Managers of Batik firms are usually also the owners and the businesses have been in the families for generations. Workers also have parents who are engaged in Batik production. Through the accumulation of experience, those firms have a stock of skills and knowledge for producing attractive and good quality Batik.

⑦ **Design and Technology**

Constraint:

● **Innovation in stamped Batik**

Stamped Batik became common in Wijirejo Village in the early 1980s and it greatly contributed to reducing production time. However, motifs of stamps are standardized and have less creativity than handwritten Batik. In order to provide customers with a variety of design, Batik firms need to buy many stamps.

● **Adaptation and technological upgrade**

Most of the Batik firms stick to traditional ways in the use of energy as well. They do not use gas or electric stoves for melting wax but rather petroleum oil and firewood. Although the Center of Craft and Batik encourages the utilization of more advanced technology, firms are not willing to adapt because if they change their energy resource and equipment, they also need to

change their work flow and style. They are also concerned about the cost and shortage of gas and electricity.

Opportunity:

- **Originality of hand-written Batik**

As people often call Batik “art,” handwritten Batik is very creative and incorporates a philosophy. Although its production requires more manpower and higher skills, producers can be innovative with design to suite their customers’ needs.

⑧ **Procurement**

Constraint:

- **Salaries and stamps**

If material costs are excluded, the other most costly expenses are salary for workers and stamps. In the case of “Batik Sekar Arum,” the amount of workers’ salary is 40-50% of their product prices. As already mentioned in constraints in activities of Marketing and Sales, and Design and Technology, purchasing of stamps is necessary for widening the variety of design. However, these are expensive and it is difficult to buy many at once.

- **Price fluctuations in electricity**

Electricity costs have been increasing in Indonesia and it has had harmful effects on every industry, including the Batik industry. According to the national newspaper, KOMPAS, Batik prices have gone up by 10% because of the increase in electricity (KOMPAS, 2010).

Opportunity:

- **Village trust agreement**

“Batik Topo,” “Batik Ninin” and “Batik Sri” belong to a village level Batik union and they have a trustful financial agreement among union members in which they lend money to each other when they lack capital or in case of emergency. Such networks between producers are very useful in order to run business smoothly.

⑨ **Margin**

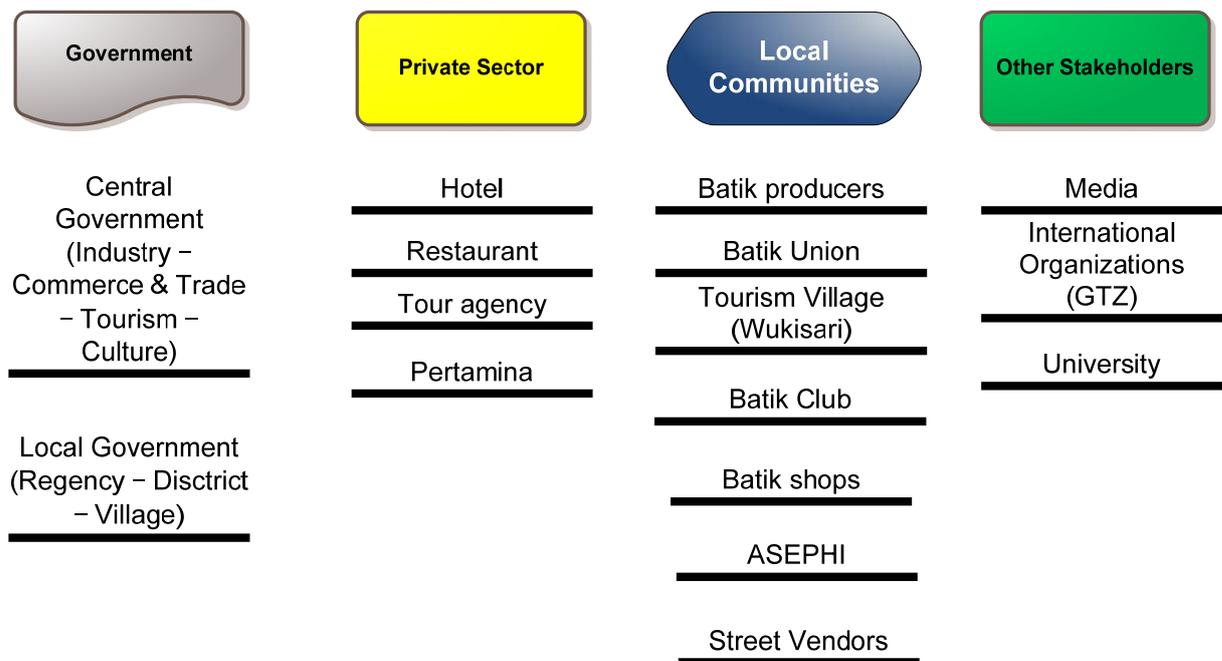
Among the six firms, the average amount of profit gained is 10%-30%. Stamped and printed Batik, which are dyed by chemical dyes, have a smaller profit margin because they require less time and manpower. On the contrary, more value is put on naturally colored, handwritten Batik resulting in a profit margin of approximately 30% of the sale price.

7. Results: Objective 2

7.1 Stakeholders involved in Batik:

Four main categories of stakeholders were identified throughout this research as mentioned in the Figure 6 below. The government plays a role in promotion and conservation of Batik as a culture, while at the same time, working to enhance economic activities based on Batik. Similarly, the private sector plays an important role in promoting Batik from a cultural perspective, as well as economic one, to enhance business. Local communities are also key actors at the micro level, producing and delivering Batik to both local and global markets. Finally there are other stakeholders who are involved with the promotion of Batik, even on a small scale.

Figure 6: Stakeholders involved in Batik



Note: - Pertamina (National Petroleum Company of Indonesia)
 - ASEPHI (Association of Exporters and Producers of Indonesian Handicraft)
 - GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) – (German Organization)

Source: The authors based on interviews

Therefore, each stakeholder contributes either directly or indirectly in the promotion of Batik

through their respective activities. Their roles and interventions will be described in the following section.

7.1.1 Government

As shown in the Figure 6, the Indonesian government is characterized by a system of complex administrative divisions. Below the central government, there is also the local government, which is represented at the upper level by provinces (*provinsi*), each with its own political legislature and governor. At the lower level, provinces are subdivided into regencies (*kabupaten*) and cities (*kota*), which are further subdivided into districts (*kecamatan*) and then into village (*desa*). Both the central and local governments are concerned with the Batik industry in the Province of Yogyakarta, and undertake, respectively, programs and activities related to the promotion of the sector. As a common policy, central and local governments both take the initiative to encourage their civil employees and public school children to wear Batik clothes at least once a week. However, interventions are located at different levels as explained below.

7.1.1.1 Central Government

The central government of Indonesia contributes to the promotion of the Batik industry through two main channels from a technical aspect, which includes the recent project of livelihood recovery and the technical center (Balai Besar Kerajinan dan Batik) of the Ministry of Industry.

a) Project of Livelihood Recovery for DI Yogyakarta and Java

For the purpose of supporting the victims of the big earthquake in 2006, the government of Indonesia has been implementing the project for “Livelihood Recovery for DI Yogyakarta and Java” since 2009. Working in collaboration with the Java Reconstruction Fund (JRF⁶) and the World Bank, this project aims to assist affected micro, small and medium enterprises (MSMEs), as well as low-income communities. Because Batik is one of the major sources of income for the population in Yogyakarta, the project is concentrating on the Batik industry and how to revitalize the community’s business, by providing them access to finance and technical assistance, strategy to work out default loans, restoring full capacity and creating opportunities for improving competitiveness. GTZ, the German organization in charge of the project,

⁶ JRF: a kind of basket fund created by several bilateral donors after the earthquake)

collaborates with different actors related to Batik production, such as the local government (province, district, and village) and the Bank of Indonesia, among others, for the implementation of their activities. The project is also trying to connect Batik producers to several channels, local as well as global, for marketing in order to promote their activity. However, because the project was just started in 2009, there is no available data regarding the progress. This is one of the central government's initiatives to assist the Batik sector in Yogyakarta, especially after the earthquake of 2006.

b) Ministry of Industry: Board of Batik and Craft (Balai Besar Kerajinan dan Batik):

One of the most important stakeholders related to Batik in Yogyakarta, the Center for Handicraft and Batik, is a central government institution that was newly re-organized in 2002 under the Agency for Research and Development of Industry, which is within the Ministry of Industry. This center aims to give support to crafters for competency and competitiveness. Its principal mission is to carry out services for training, testing, standardization, consultancy, research, engineering and technical services in the field of handicraft and the Batik industry. It also aims to create professional human resources and to make handicraft and Batik related SMEs as the main partners. Therefore, it has a vision of becoming the trustworthy and professional leader, as well as the autonomic center of industrial development and services in the field of handicraft and Batik (Pamphlet, 2010). The Center is equipped with the following facilities just for Batik industry:

- Laboratories for Batik process: natural dyes, Batik design and testing
- Experts consisting of Batik designers: colorists, fashion designers, weavers, inspectors and extension workers to be dispatched to the villages for socialization and dissemination of information
- A complete library of Batik collections in Indonesia

Given the emphasis on R&D (Research and Development), as a government institution, it receives considerable support and assistance from several international organizations, such as JICA (Japan International Cooperation Agency), the German Organization GTZ and others, in performing its principal activities, which are summarized in the Table 3 below:

Table 5: Task and Function related to Batik of the Center for Handicraft and Batik

Topics	Activities	Purposes
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In Center training	<ul style="list-style-type: none"> - Coloring of Batik - Technology process for painting Batik - Technology process to create crushed Batik with silk material - Technology process for silk Batik - Batik cloth rag handicraft making process 	<ul style="list-style-type: none"> - To developed skills for Batik producers
Workshop at the village level	<ul style="list-style-type: none"> - Coloring of Batik - Technology process for painting Batik - Technology process for in silk Batik 	<ul style="list-style-type: none"> - To developed skills for Batik producers - To disseminate new and improved tools - To establish networks among villages
Engineering	<ul style="list-style-type: none"> - Electric wave production (operation and maintenance) 	<ul style="list-style-type: none"> - To improve efficiency
Certification	<ul style="list-style-type: none"> - Trademark for Batik made in Indonesia (writing Batik, stamped Batik, combination Batik) 	<ul style="list-style-type: none"> - To improve costumer's trust
Testing	<ul style="list-style-type: none"> - Defects in the Batik process 	<ul style="list-style-type: none"> - To ensure quality

Source: The authors based on information from Center for Handicraft and Batik, 2010

Apart from the above, the Center is also publishing scientific a journal related to Batik twice a year, in order to share and deliver information about the results of the R&D activities. Nowadays, its activities are expanding and up to 100 SMEs are now receiving support from the Center, through 3 to 4 training sessions per month, which includes 5 to 10 trainees per session. In order to get support and attend training, the government provides free training sessions for Batik producing SMEs in the form of a subsidy of 1,700,000 Rp (USD 190) for one round training. Some foreign trainees, such as trainees from India, are also benefiting from the center's services, through a bilateral agreement. Regarding the technical services, the center usually applies a participatory approach, consisting of consultation with the Batik producers while defining the materials to be developed, such as the electric wave, which is sold for 150.000 Rupiah (USD 16) per unit, in order to ensure the sustainability and facilitate the Operation and Maintenance (O&M).

Due to its emphasis on R&D, no training for marketing is provided rather focus is given to the technical aspects of the Batik process. The main problem encountered is the stickiness of the Batik producers to the traditional techniques, so that it is difficult to change their habits. The Center is therefore facing problems in disseminating the new materials, such as the electric wave, to the Batik producers, even though they were consulted during the development process. Another challenge identified would be the problem related to the waste management system from the coloring of Batik, which causes damage to the environment due to the chemical color used by many producers. To tackle the above-mentioned issues, the Center proposes the strengthening of human resource development among its agents, through further collaboration with universities and other related stakeholders, such as tour agencies.

7.1.1.2 Local Government

As for the local government, interventions take place at different level such as regencies, districts and villages. Involvement of the different branches of local government is described below:

a) Cultural and Tourism Office of Bantul Regency (Kabupaten):

This organization belongs to the local government of Yogyakarta, and aims to promote and develop “tourism villages” in the province, especially in Bantul Regency. The principal role of the Cultural and Tourism Office of Bantul Regency is to provide those tourism villages with the necessary skills to manage their business efficiently through trainings held every three months at each village, related mainly to management and marketing promotion. For this purpose, programs such as homestay management, promotion materials, marketing strategy and exhibition activities are proposed by the Office, which is also collaborating with other branches of the local government, such as the Office of Commerce and Trade, as well as the Office of Culture. As for Batik, the Office encourages Tourism Villages to participate in the Batik Festival, which is organized every year in order to promote Batik. As a part of handicraft products, the Batik industry is then also benefiting from the services provided by the Regency Office, which encourages linkage between tourism and Batik. This also contributes to the global promotion of Batik, as mentioned in the Annual Plan of 2010, which is to “promote widely regional tourism products to both national and international markets.”

b) Javapromo at the district level (kecamatan):

Javapromo is a brand name of a promotion board, which is a cooperation of 15 districts and cities in Central Java and Yogyakarta created in 2002. The board aims to promote these parts of Indonesia as an attractive tourism destination, and take advantage of the existence of historic

temples such as Borobudur and Prambanan. The District of Bantul is also an active member of the board, and shares the same objective of “maintaining, developing, promoting and marketing tourism in all areas.” Among the tourism products being promoted through Javapromo, handicrafts are also benefiting from the partnership between districts and cities to achieve what is called “Java Tourism”. Therefore, Batik industry is also concerned with the promotion activities of Javapromo. For this purpose, the main actor at the local government level of Yogyakarta is the Cultural and Tourism Office of Bantul Regency, through the Batik festival and exhibitions they organize together in order to promote Batik and other products via the tourism villages. This organization could be also an important stakeholder identified at the local government level in order to promote Batik to both local and global markets through tourism development.

c) Village Chiefs (Desa):

At the micro level, village chiefs also play important roles in promoting Batik, as they are close to the villagers and Batik producers within the village. They often serve as a communication bridge between the Batik producers, unions, Batik firms or SMEs in the village and the central/local government. Indeed, most of the important information related to Batik, such as technical announcements or promotion activities like exhibitions, is often first delivered to the village chief before being announced officially to other stakeholders. With this regard, the Desa Offices, through the village chiefs, are also considered as an important stakeholder for promoting Batik at the local government level.

7.1.2 Private Sector:

The private sector in Yogyakarta also contributes actively in promoting Batik from both cultural and economic aspects. Hotels, restaurants, tour agencies, and private companies as well as business associations, are concerned either directly or indirectly with Batik promotion through their own businesses. It could be a part of their main activities or just for marketing purposes. Following the government policy and their awareness of the importance of Batik within the Indonesian society, their involvement in the promotion of Batik is summarized as below:

7.1.2.1 Hotels

Mainly as a part of a marketing strategy, Batik is often used by a majority of the prestigious hotels in Yogyakarta. Taking advantage of its cultural attractiveness, hotels use Batik as a means to attract more tourists and to promote their activities related to tourism. Such is the case

for Santika Hotel, a four stars hotel in the heart of the province, which uses Batik for the staff's uniforms, table clothes, curtains in the rooms, pajamas for customers, etc. This is related to the hotel's commitment, which is to "promote culture and hospitality," with the emphasis on culture given especially to Batik. The reason for such a strategy is simply that Santika Hotel recognizes the importance and value of Batik within the Indonesian society, as well as its potential for the global market and for attracting tourists. Moreover, a Batik painting exhibition is held every day at the "welcome salon" of the hotel in order to satisfy guests, which are composed of 65-70% local tourists and 30-35% foreign tourists (mainly from the Netherlands, Germany, Singapore, Malaysia and Japan), who want to know about the painting process of Batik. These exhibitions are held daily except during the Ramadan period. From such activities, customers may have the opportunity to produce Batik in for themselves, which the hotel will send to them later as a souvenir. Furthermore, three private shops are renting the hotel's facility for their businesses, where customers can buy both handwritten and stamped Batik. Such kinds of activities related to Batik are observed in several hotels, and may constitute an important factor for global promotion. However, the issue of global promotion of Batik remains the main problem for the private sector, because Yogyakarta is only considered as a transit destination for tourists, mainly foreign tourists. For this purpose, promotion activities through websites are important.

7.1.2.2 Restaurants:

Similar to hotels, most restaurants in Yogyakarta, especially large and famous restaurants, are using Batik for simple decoration motifs, or for a secondary activity. Such promotion activities of Batik are related, in some case, to its cultural aspect, as well as for a marketing strategy. One of the famous restaurants in Yogyakarta using Batik as a secondary activity is "Gadri Resto," which belongs to the younger brother of the 10th Sultan of the Province. As a royal belonging, besides its main activity as a restaurant, Gadri Resto has the duty of promoting local culture, especially Batik, since its opening in 1975. It features a Batik showroom and workshop within its facilities. As a secondary activity, the main revenue from Batik comes from handwritten Batik, made by contracted and fixed producers in Bantul. However, Gadri Resto is selling also stamped Batik, which is supplied by local producers based in Solo with whom a contract is made in order to satisfy the local demand and to increase job opportunities for local people. Stamped Batik constitutes one of the "well sold products" of the restaurant in terms of number, which averages 5 to 10 pieces a week, compared to only one piece per week for handwritten Batik. In this restaurant, customers for handwritten Batik are mainly composed of

local tourists who are searching for an authentic Batik design and color, and who usually need it for special occasion such as wedding. It also includes foreign tourists who seek “real Batik.” Government institutions and schools are the main customers of stamped Batik and often place orders directly to the shop to create their uniforms. The approximate price for one piece of handwritten Batik is 2.6 - 3 million Rp. (291-335 USD). The price for “stamped Batik” is around 250,000 - 300,000 Rp. (28-33 USD), from which approximately 10% is profit for the shop. In order to promote sales, Gadri Resto often participates in several Batik exhibitions and workshops in Yogyakarta and distributes pamphlets to certain tour agencies, as well as use of its homepage, which presents a brief description of Batik. Media such as newspapers occasionally cover events related to Batik in the restaurant and such situations contribute to promote this secondary activity. However, the Batik business is mainly limited to the local market, as Gadri Resto is not exporting Batik to any foreign country. Such initiatives to promote local culture and combine Batik as a secondary activity is important to stimulate the global promotion of Batik in Yogyakarta.

7.1.2.3 Tour agencies:

Tour agencies are the main actors to bring both local and foreign tourists to Yogyakarta. They offer different tour packages, based mainly on the Borobudur and Prambanan temples. Tourism villages are also proposed in their menu, which includes visits to Batik firms which highlight the Batik production process for tourists. On example, proposed by “Sweety” tour agency, allows a round trip visit to Wukisari Tourism Village. This is the way tour agencies are promoting Batik interconnected with tourism in Yogyakarta. They collaborate with several stakeholders, such as tourism officers, Batik related organizations and Batik producers. Though the majority of customers visiting Yogyakarta are local tourists, this could be a way for connecting Batik to the global market as well.

7.1.2.4 Private / National Companies:

Some private companies contribute also to promote and develop the Batik industry in Yogyakarta as a cultural heritage of Indonesia. This could be seen as a part of the social assistance provided by companies, who sponsor Batik producers to participate in events and to get technical assistance from supporting centers. Pertamina, a national petroleum company, is one of the biggest companies doing these kinds of activities. This shows the involvement of some private or national companies in the promotion of Batik in Indonesia. That makes them an important stakeholder for the global promotion of Batik.

7.1.3 Local Communities:

Because Batik is often the main source of income, local communities are by far the main actors at the micro level for Batik promotion. Consisting of Batik producers regrouped in a family firm or SMEs, Batik shops as well as street vendors, Batik unions and clubs, tourism villages and local communities are all those who receive direct benefit from the promotion of Batik. Therefore, they were defined as main stakeholders for this research

7.1.3.1 Batik Producers:

Batik producers consist of Batik firms who have Batik as the main source of income based in the villages. Most of them are family firms, such as “Batik Topo” or “Batik Nining.” The major part of their production is stamped Batik, mainly for commercial purposes. However, they are also producing handwritten Batik and sometimes combination Batik. Batik producers are those who receive support and assistance from the different stakeholders mentioned above, and they collaborate with different organizations in order to sell and promote their products. They might be a members of tourism villages or not, but their main concern remains Batik. Their products are the items to be promoted globally, the main subject of this research.

7.1.3.2 Union

The union consists of an association of Batik producers, especially new firms, who have common interests and a willingness to grow better and together within the Batik industry. It is located in Wijirejo village under the name of “Paguyuban Pengrajin Batik Wijirejo” (PPBW) in Bantul, and is comprised of 14 members. The main purpose of the union is to share information related to markets, events, and techniques among its members, as well as for mutual support. They receive assistance from the supporting agencies and organizations, such as the Center of Handicraft and Batik.

7.1.3.3 Tourism Villages

A Tourism Village is an association of handcrafters having the same objective and collaborating together in order to develop their activities by attracting tourists in their villages through handcrafts products. These have been created especially after the earthquake of 2006. Batik producers are also members of the association, as is the case for Wukisari Tourism Village. Their products are also promoted through the activities of the association, receiving assistance from the supporting agencies. These are also important stakeholders in the global promotion and for Batik development.

7.1.3.4 Batik club

This club consists of a group of “Batik lovers” under the leadership of Mrs. Suriandro and

created in 1997 by seven original members to promote and preserve the “real Batik” culture, which is attributed mainly to handwritten Batik. Nowadays, it counts 500 members who meet once a month. As mentioned above, its main objective is to valorize handwritten Batik, and thus, its members are only handwritten Batik producers. In order to promote their activity, the club often participates in exhibitions to show their products. Up to now, the club has not been registered as an official institution and its main purpose is only to bring producers together and share information related to the Batik sector. Therefore, there is no promotion of activities on behalf the club via pamphlets or media, though each member may promote activities through websites for their own showroom, though these do not engage the club.

7.1.3.5 Batik shops:

Batik shops, as defined for the present research, are generally those located in Malioboro, but there are also some Batik shops within the Batik producer’s house in a village or in other tourism sites or hotels. Most of the Batik shops located in Malioboro, such as Margaria Shop, collaborate with the Batik producers from Bantul to provide them with Batik products. However, they might also have their own production network. The main costumers are local tourists, but sometimes there are also foreign tourists that travel agencies, such as Sweetie, bring to their shop. Some shops such as Margaria are exporting Batik abroad and are deeply involved in events related to Batik promotion. They are important actors for the local and global promotion of Batik.

7.1.3.6 ASEPHI:

ASEPHI stands for the Association of Exporters and Producers of Indonesian Handicraft, created in 1975. It is supported by the central government through the Ministry of Trade, the Ministry of Industry, the Ministry of Culture and Tourism, the Ministry of Cooperative and SME and the Ministry of State Owned Enterprise. Its main objective is to support handicraft exporters to connect to the global market. Batik shops such as Margaria are also members of the association. It provides handicraft exporters with necessary information, such as international exhibitions or festivals related to their product, and constitutes an important factor for the global promotion of Batik.

7.1.3.7 Street Vendors:

The stakeholder ‘street vendors’ refers to those located on Malioboro Street, which is a kind of common market for handicraft and souvenirs for both local and foreign tourists. Street vendors sell many Batik products, especially stamped Batik, which is relatively cheaper than

handwritten. The main purpose for street vendors is then strictly commercial and their targeted costumers are mostly the majority of people who cannot afford to buy expensive handwritten Batik. To run their business, they collaborate with stamped Batik producers coming mainly from Solo rather than Bantul, because Bantul is known mainly for handwritten and more expensive Batik. In other words, most of the costumers of street vendors in Malioboro are local people who want to wear Batik at a cheap price, as well as some foreign tourists who buy handicrafts as souvenirs.

7.1.4 Other Stakeholders:

Other important stakeholders were also analyzed for this research, as they may play an important role for the promotion of Batik in Yogyakarta. These stakeholders include the media, international organizations and Universities. Their activities related to the Batik sector are summarized in the following section.

7.1.4.1 Media

The role of the media, such as the newspaper in the promotion of Batik, is at the moment, limited mainly to writing a simple article about Batik, depending on the interests of the journalist. For example, a journalist working for *Kedau Latan Rakyat* (newspaper) said to have a personal interest on Batik, writes occasion articles. The contents of the article are often related to its cultural aspect, in order to share the importance of Batik as a culture within Indonesian society. Moreover, the media often covers such events as Batik exhibition and festivals. Batik producers also use the media to advertise their products. Newspapers are the most popular due to their attractive prices for services. However, articles and commercial advertisement posted in the media in Yogyakarta are often in Bahasa language. Therefore, the promotion of Batik through the media is limited to local markets for the time being, and do not contribute much to the global promotion of Batik.

7.1.4.2 International Organizations

Especially since 2006, several international organizations have been implementing different projects in order to support the victims of the earthquake, concentrating on enhancing economic activities of the local population in the provinces of Yogyakarta. Aware of the importance of Batik within Indonesian socio-economic life, international organizations consider the Batik industry in their respective programs as a key factor to revitalize the businesses of the local community. For this purpose, technical, as well as marketing and organizational aspects of the

sector are often covered by the implementation of various programs and projects. Some of these organizations include: GTZ, with the abovementioned project of “Livelihood Recovery of DI Yogyakarta; JICA through sending experts and volunteers related to Batik to work with technical centers and local communities; and also ADB, the World Bank, European Union, etc. International organizations are important stakeholders in promoting Batik both locally and globally in Yogyakarta.

7.1.4.3 Universities

There are university scholars who study and spread knowledge about Batik through their research activities. Therefore, their intervention in the promotion of Batik is also important in Yogyakarta. The University of Gadjah Mada for example, is collaborating with the Wukisari Tourism Village in promoting and developing the Batik industry. The university provides the community with technical support, such as the creation of pamphlet to advertize their activities, and by building networks among the Batik producers and other stakeholders interested in Batik. Such interventions make universities important stakeholders for the local and global promotion of Batik in Yogyakarta.

7.1 Existing linkages between Batik and Tourism

7.2.1 Description of International tourists visiting Yogyakarta

Most international tourists are coming from Europe (70.4%), mainly from the Netherlands, France and Germany. Asia constitutes the second largest population (25.9%) and Australia the third (3.7%), regardless to gender. They are predominantly young (63% in the range of 29 to 39 years old) and almost all of them (92.6%) visit Yogyakarta during their time. Reasons for visiting Yogyakarta are for vacation (88.9%) or for visiting friends and relatives (7.4%). However, among the foreign tourists visiting Yogyakarta for less than a week (88.9%), 95.8% stay for vacation, whereas all the foreign tourists visiting Yogyakarta for one to two weeks (3.7%) are visiting friends and relatives. Finally, half of those staying over two weeks have other purposes.

Table 6: Length of stay

			Length of stay			Total	
			Less than a week	1- 2 weeks	More than 3 weeks		
Purpose of the trip	Vacation	Count	23	0	1	24	
		% of Total	85.2%	0.0%	3.7%	88.9%	
	Visiting friends/relatives	Count	1	1	0	2	
		% of Total	3.7%	3.7%	0.0%	7.4%	
	Other	Count	0	0	1	1	
		% of Total	0.0%	0.0%	3.7%	3.7%	
	Total		Count	24	1	2	27
			% of Total	88.9%	3.7%	7.4%	100.0%

Source: Authors based on interviews

The length of stay in Yogyakarta depends on the purpose of visiting the tourism destination.⁷ In Yogyakarta, the standard tour package is provided for one or two days. It consists of trips to see the ruins at Borobudur and Prambanan and to visit the cultural centers of Yogyakarta, including the Kraton and Malioboro Streets. However, an additional package is provided by a few tour agencies. This package consists of a visit and stay in a Tourism Village, which is a village area that has some special characteristics where traditions and culture of the local community are still pure. Facilities such as transportation, telecommunication, medical,

⁷ Fisher's exact statistic (0.025) was used instead of the traditional Pearson chi-square for the simple reason that chi-square test assumes that each cell has an expected frequency of five or more, whereas the Fisher's exact test has no such assumption and can be used regardless of how small the expected frequency.

and accommodations are also provided so that the Tourism Village can become a viable tourism destination. Another attraction of Tourism Villages is that tourists can participate in traditional ceremonies, experience local life and learn traditional art.

7-2-2 Linkages between Tourism and Batik

The UN cultural organization, UNESCO, recently added Indonesia's method of making the Batik cloth - through a laborious process of wax-dipping and dying - to its list of the World's Intangible Cultural Heritage. This recognition led the Indonesia government to make this culture asset as an attraction for socio-economic development by means of education, tourism and trade. The government's primary policy was that all public servants should wear Batik clothes on both Thursdays and Fridays. As a matter of fact, this regulation gained acceptance and had an impact, which led to the preservation of Batik as a national identity. Therefore, strengthening linkages between tourism and Batik is one of the most effective ways to promote Yogyakarta globally, because it directly connects Batik to the global market.

The linkage between tourism and Batik can be strengthened by:

- Upgrading the production capacity of Batik producers for more added value
- Facilitating Batik producers to enter the tourism value chain
- Expanding education and information for Batik in the global level

This section will study the linkages between tourism and Batik by understanding how Batik producers can enter the tourism value chain and how to expand Batik education and information at a global level.

7-2-3 Market

The most obvious link between the tourism and Batik is through the supply of Batik to the tourism industry. Tourism in this paper is understood as an all-embracing concept, which includes all relationships and phenomenon associated with the travel to and the stay of people at places around the world. It involves complex activities such as travel, accommodation and catering, sightseeing, shopping, leisure and entertainment.

As for travel, our analysis suggests a strong linkage with Batik. On our domestic flight from Denpasar airport (Bali) to Adisucipto (Yogyakarta), the flight attendants were dressed in Batik. In that way, they served as tourism ambassadors, as their uniforms reflected the richness and character of Indonesian culture. Another linkage was found in Adisucipto airport, where it was easy to encounter Batik advertisement and shops. However, we found weak linkages between tour operators and Batik. A review of Yogyakarta tours revealed that Batik tours are not often

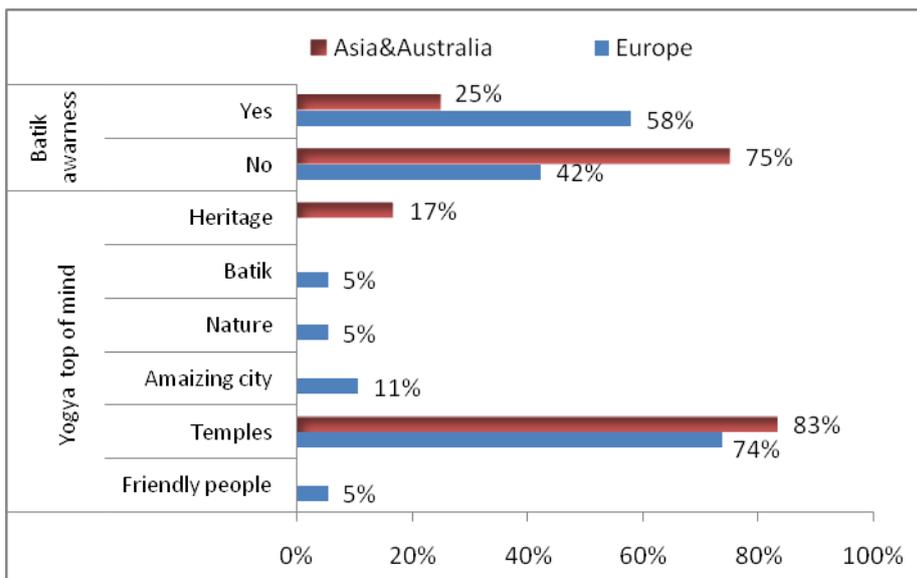
emphasized.

The second tourism component observed was accommodation and catering. Using the Batik image as a marketing tool for private business seemed to be a commercial strategy for some hotel managers. Many hotels, resorts, guesthouses and restaurants have strong linkages with Batik. First of all, most of the ranked hotels and high standard restaurants have Batik shops or galleries. Secondly, business regulations are in place for staff to wear Batik clothes on the weekends. Some hotels, like Santika Hotel, goes further in decorating the walls with Batik and using Batik clothes as pajamas for visitors. They also organize Batik workshops to entertain kids coming from all around Yogyakarta.

Since tourism relies on attractions and sightseeing, after visiting all the important tourism destinations in Yogyakarta (Kraton, Borobudur and Prambanan), we find strong linkages with Batik. In the three destinations, there are handicraft markets where Batik is exposed in markets located right at the exit of the destinations, making it difficult to avoid. Kraton is also located near to the major shopping street, Jalan Malioboro, a souvenir paradise in Yogyakarta. This area contains both street vendors and modern shops that sell a variety of Javanese handicrafts, including Batik clothes. Malioboro possess the advantage that tourists can walk on foot along the street, which is crowded with Batik products.

7.2.3 Information

Figure 7: Awareness of batik

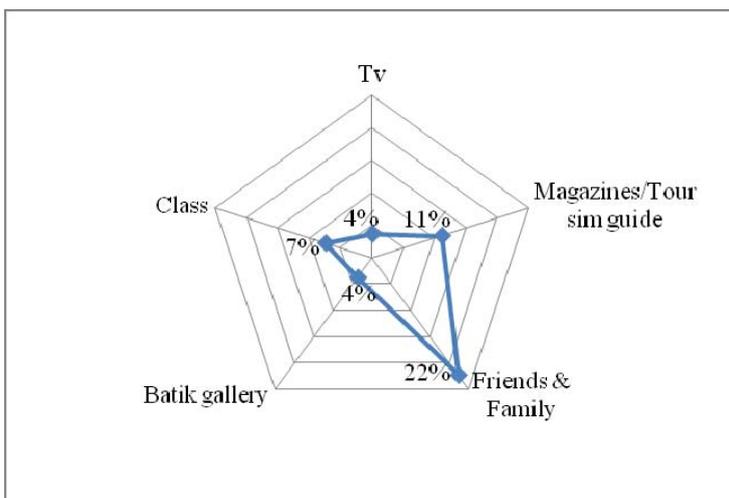


Source : The authors based on interviews

Another way to link tourism to Batik is by raising tourists' awareness about Batik as a tradition, as well as a commodity. In terms of tradition, we find linkage in the Tourism Village concept. Indeed, Tourism Villages offer tourists the opportunity to learn and practice how to make Batik and to understand the "spirit" of Batik design. However, the linkage is still weak and underexploited.

When considering Yogyakarta, the image of Borobudur or Prambanan is what first comes to mind. Recognized as the largest Buddhist temple of the ninth century and the most beautiful Hindu temple in the world, Borobudur and Prambanan have been offered as a part of tourism packages to Yogyakarta for a long time. Since the two destinations were declared World Heritage sites in year 1991, 17% of tourists identify Yogyakarta with their cultural heritage. Moreover, these images are strong in the minds of tourists coming from Asia and Australia. On the other hand, tourists from Europe have images of Yogyakarta, such as friendly people, nature and as an amazing city.

Figure 8 Source of Batik Awareness



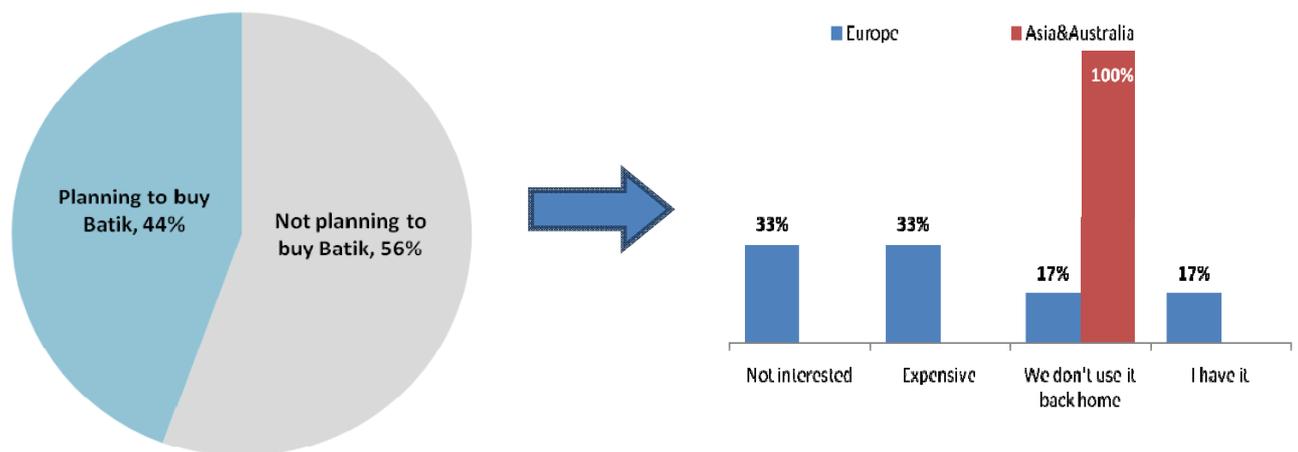
Source: The authors based on interviews

Batik awareness is very low among tourists. This is the direct consequence of miscommunication and lack of promotion of Yogyakarta as a tourism destination. Our survey concludes that Batik has only a 5% of awareness factor. Moreover, only one fourth of the tourists from Asia and Australia, and half of the European tourists recall hearing anything about Batik before they visited Yogyakarta. In 22% of cases, they heard from their friends or family, while 11% heard from magazines or tourism guides. Furthermore, 7% heard about Batik in the

classroom. It's important to point out that tourists did not mention the internet as a source of Batik awareness. In fact, Batik from Yogyakarta is mainly promoted using traditional channels (magazines, television, etc.) instead of moving toward social media as tools for promotion.

The lack of Batik information impacts the willingness to buy Batik. Our analysis concludes that 56% of tourists are not interested in buying Batik, with 60% having no knowledge of Batik before traveling to Yogyakarta. Reasons mentioned for not buying Batik range from lack of interest or usefulness to the price. This despite that Batik can be used for clothes, table settings and souvenirs and the price in Yogyakarta is cheaper because of the currency and the cost of living.

Figure 9 Reasons for not buying Batik



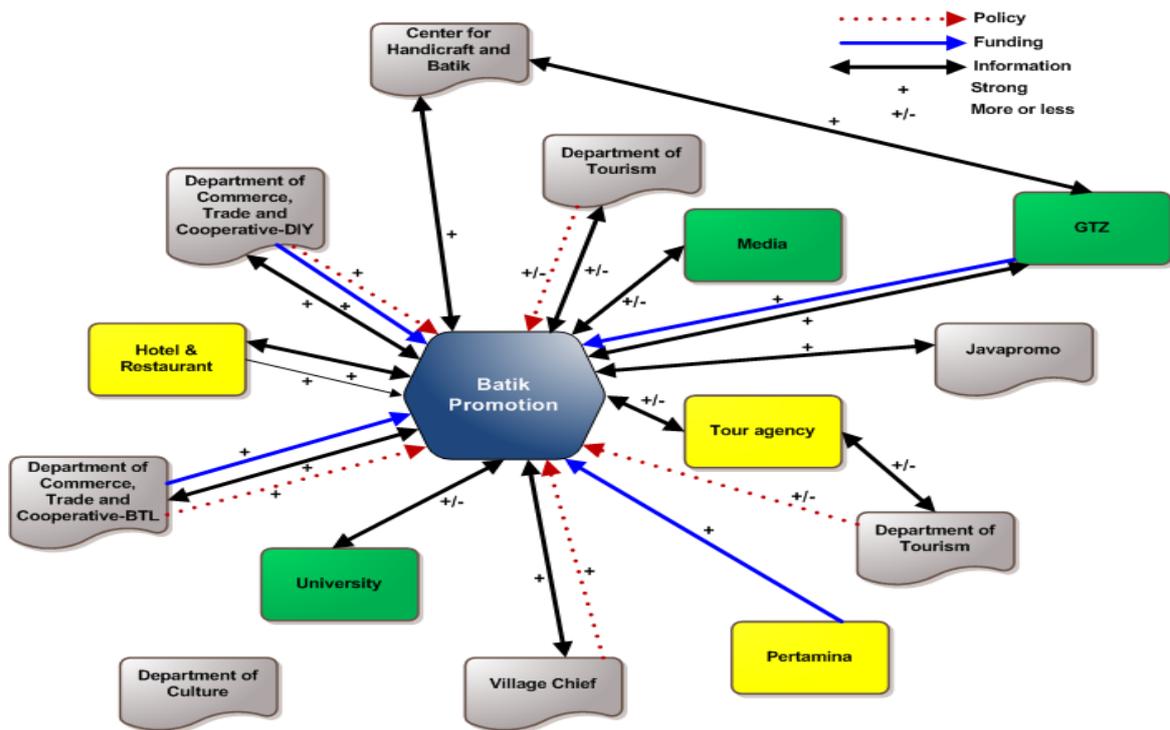
Source: The authors based on interviews

7.3 Cooperation among stakeholders in promoting Batik

Cooperation between different stakeholders has been acknowledged to procure many benefits, such as participation. However, this is not a simple process for the reason that stakeholders are more often coming from different sectors, have different interests or perceptions and are independents. In Yogyakarta, there exists institutional cooperation among stakeholders involved in Batik promotion, as depicted in Figure 10. Figure 10 also represents how the stakeholders collaborate when it comes to organize the “Malioboro Festival.” The festival is dominated by the images of Batik as a symbol of high Indonesian culture, especially belonging to the people of Yogyakarta, and aims to treat Batik, not only as tourism attraction, but also as an economic

commodity to be sold to tourists.

Figure 10: Institutiogramme of cooperation for stakeholders



Source: The authors based on interviews and observation

This institutiogramme shows that relationships should be established with the Department of Culture. At the same time, cooperation with media and tour agencies should be strengthened. This graph shows also that collaboration among government institutions should be strengthened. This implies a need for more coordination among stakeholders. For example, universities are not involved in an efficient way while Javapromo is not receiving benefits of media promotion. In addition, institutional cooperation is limited in policy, funding and information.

7.3.1 Policy

Policy related to the promotion of Batik is set mostly by both local and central governments, through their respective departments work in different domains. The policy might be to promote

Batik as a culture, such as the rules for wearing Batik at least once a week for civil servants in order to conserve its value, but it could be also a marketing policy through different programs implemented by the Government such as the support to tourism villages, livelihood recovery project etc. For this purpose, the Department of Commerce, Trade and Cooperative at the Regency and District Level, as well as the Village Chiefs in Desa, are playing important role in setting the policy for promoting Batik, and the Department of Tourism contributes also either directly or indirectly through its tourism policy. However, no strong cooperation among stakeholders related to Batik were observed in setting the policy, and that shows the power that the Government is having for both local and global promotion of Batik.

7.3.2 Funding:

The promotion of Batik in Yogyakarta requires capital to implement the activities. Central and local government, international organizations, as well as the private sector are contributing, either independently through their respective programs, or jointly through a common project. Such is the case of the Department of Commerce, Trade and Cooperative which offers subsidies to Batik producers and SMEs in order to allow them to attend training in the Center for Handicraft and Batik, as well as international organizations who provide funding through different project and programs such as GTZ, JICA, ADB, the World Bank, etc. Private sector companies, such as the petroleum company Pertamina, are also contributing to support Batik by sponsoring producers and events such as exhibitions and Batik festivals. In terms of funding, a small form of cooperation is observed among the stakeholders, as in the project for livelihood recovery in collaboration with the central and local governments, international organizations, and community based organizations.

7.3.3 Information:

Information related to the promotion of Batik comprises technical and marketing aspects and communication among the stakeholders. Several types of cooperation about information sharing were observed throughout the research, taking into account the purposes of each stakeholder. Local and central governments play, once again, important roles in distributing information related to Batik among stakeholders through the organization of events such as exhibitions and Batik festivals and technical support through the Center of Handicraft and Batik, etc. The private sector acts to bridge producers and customers by diffusing information about Batik through direct or indirect activities, which is important for the local and global promotion

of Yogyakarta. Other stakeholders, such as international organizations, offer marketing training to Batik producers.

8. Concluding Remarks and Recommendations

8.1 Enhancing Efficiency in Batik Production

Based on several interviews with different Batik producers and stakeholders, along with the observation of the production process, the value proposition and the efficiency of the process itself, it was determined that there are constraints due to three specific needs: skill needs, marketing needs and capital needs.

Figure 11: Constraints and Opportunities of the Batik Production Process



Source: Based on the interviews conducted by the authors in 2010

In Figure 11 it is possible to more specifically identify the nature of these three binding constraints. Initially, the earthquake affected the financial position of the producers, so that any

planned expansions had to be delayed due to the default of previous credit. This credit constraint mainly affects long-term investments, such as modernization of infrastructure, machinery and stamps. In spite of the efforts of GTZ's microcredit programs, many small producers still cannot access formal credit, relying instead on informal loans mainly obtained through village neighbors and friends. In terms of skill needs, it is true that the Technological Center of Bantul continually tries to disseminate technical upgrades, mainly in the form of machinery upgrades, however the geographical scope of this practice seems to be still limited. Furthermore, besides technological upgrades, the value chain framework highlights that in order to increase efficiency and increase the value proposition of the product, management skills must also be upgraded. Specifically, based on the interviews, managerial skills could be improved for new product development, eco-friendly management, financial planning and control techniques. Finally, there are also marketing needs that burden the current value proposition. The literature in marketing practices suggests that producers should constantly be analyzing market conditions and trends in order to set a price, which has to be appropriate for the segment that is being targeted. In the case of Bantul, producers can rarely identify market segments. Instead, they tend to be more reactive to consumer orders. Simply, producers expect that the market will come to them instead of offering products in specific market segments by themselves. This passive behavior of producers can be understandable due to the lack of information and can be very particularly problematic for small producers because they often do not have enough bargaining power against big and informed consumers. In the interviews, the majority of the producers mentioned that they do not share information about the types of clients they are selling to. Although there are formal associations, the agenda seems to be focalized on capital problems rather than market problems.

Within the context of identified constraints, the notion of global promotion of Batik is not only challenging, but also can be identified as a very important incentive for overcoming the mentioned constraints. Looking forward to international markets, a suitable strategy might be the conformation of joint ventures. Global partners not only could contribute to increase investment capital, but could also contribute to managerial techniques, which are required to increase local efficiency and compete globally. Having access to international markets can be very difficult and costly for small producers; therefore, the conformation or reorganization of Batik associations is needed to reduce the costs of global marketing through economies of scale and scope. The re-conformation of Batik associations implies the dissemination of the best productive practices. For example, the problems of some of the non-standardized activities such

as coloring can be reduced, or at least ameliorated, if producers create and follow specific procedures step by step. The documentation and dissemination of the best practices through production manuals can be a tool for standardizing high quality output, or at least having a common base for discussing problems. In these new networks, the agenda should be led by the cultural brand of the art of producing Batik and the meaning of the motives. The conformation of such productive networks requires not only the institutional organization of producers, but also the organization, collaboration and coordination of other stake holders such as local governments, associated industries, international agencies and local communities. Specially, the link between the Batik industry and the tourism industry can be explored as the first step to reach global markets.

8.2 Global promotion of Yogyakarta through the linkage between tourism and Batik

This research also confirmed the place Batik occupies within the Indonesian society. Consisting of an important cultural value, it contributes to the national economy and stands as one of the major sources of income for many people. Therefore, it involves individuals, groups and firms, as well as state and international organizations in the process. This situation can be shown through the actions taken by the above-mentioned stakeholders as described in Section 7.1. All of them contribute either directly or indirectly to the promotion of Batik, both locally and globally, but as stated, Batik is mostly promoted in local markets. In other words, the main costumers of Batik products in Yogyakarta are local tourists, rather than foreign tourists, due certainly to its cultural value. Moreover, most of the foreign tourists visiting Yogyakarta do not know about Batik (60%) before they come to the region. This situation shows the existing failure in the system for the global promotion of Batik, and its potential linkage with the tourism sector. This is due to the lack of the coordination among the stakeholders. Indeed, it seems that most of the stakeholders are working separately, without consultation and strong collaboration with others. As presented in Figure 10, many actions are undertaken by several stakeholders in order to promote Batik, but these actions could be considered as individual contributions of the related organizations, most likely depending on their own vision, interests and objectives. Such is the case, for example, of the private sector consisting of hotels and restaurants, which undertake actions to promote Batik through their activities to boost their own business, but most of the time without specific collaboration with other principal actors such as the state. Such initiatives are certainly a good way to promote Batik and tourism, but it would be more effective with coordination and collaboration with other entities.

The Tourism Village concept is one of the most important cases showing efficiency and coordination. In addition, the existing linkage between tourism and handicraft in general contribute to the global promotion of Yogyakarta. In fact, the central and local governments, as the main institutions to set policies related to each sector, play the key role to promote tourism via handicrafts such in Wukisari Tourism Village. For this purpose, collaboration among these institutions with the private sector, local communities and other stakeholders, can be seen through the implementation of the programs at different stages. However, despite the apparent success of the Tourism Village concept, Batik is still unknown among foreign tourists. Indeed, handicraft described for the Tourism Villages covers a large number of products, but the main concern of this research is only Batik products. It therefore assumes that the Tourism Village concept enhanced the existing linkage between tourism and Batik and would also contribute to the global promotion of Batik, which has not yet been seen. Hence, one would argue that collaboration at a large scale, involving different channels to allow this global promotion of Batik via tourism, and tourism via Batik, should be promoted under the leadership of both the central and local government. Diffusion of the information at the national and international level is very important to increase the awareness of potential customers by the means of IT and media, requiring collaboration and partnership among organizations such as travel agencies, hotels, restaurants, universities, and so on, under the supervision of governmental entities.

Finally, the findings of this field work suggest that linkages between tourism and Batik can be strengthened by facilitating Batik producers to enter the tourism value chain and expanding education and information about Batik on the global level. Promising linkages are found between Batik and tourism destinations; however there are still leakages in terms of information. Batik awareness is very low among tourists. This is mainly due to the fact that Batik is mostly promoted via word of mouth or media through television and magazines. Nevertheless, in order to be present in the global market, the use of new informational technologies and social media such as Facebook, YouTube or Twitter offer new opportunities to increase the awareness of Batik in an efficient way. It also serves as a path to promote Yogyakarta since the lack of Batik information impacts the willingness to buy Batik.

9. Acknowledgement

Working Group 1 of OFW 2010 was supported by many people and institutions in Japan and Indonesia. We would like to thank the people who we met during OFW. We greatly

appreciate Professor Usami for his comprehensive guidance and constructive comments. Professors from GAJAMADA University provided us with the great opportunity to meet and talk with many interesting and kind-hearted people. Our translators and coordinators, Professor Dedy Permadi, Ms. Niken B. Pratiwi and Ms. Rizky Lia Pratiwi from GAJAMADA University helped us to communicate and provided us with additional background information. We greatly appreciate their effort and knowledge. We are deeply thankful to the many interviewees. We were able to share their considerable experience and knowledge and this helped us to deepen our understanding. Without their kind support and cooperation, we could not have completed our research. We hope they understand our sincere gratitude.

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Working Group 2
Education

The Impact of Educational Finance on 9-year Education Regarding School Accessibility and School Quality:

The Case of Schools in Yogyakarta City and Bantul Regency, Indonesia.

1. Introduction
2. Purpose of the study
3. Methodology
4. Scope and limitation of study
5. Educational finance in Indonesia
6. Analysis
7. Conclusion
8. References

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1. Introduction

Indonesia is a developing archipelagic nation with a rapid growing population. Its education system reflects its diverse religious heritage. Although a draft constitution stated in 1950, that a key government goal was to provide every Indonesian with at least six years of primary schooling, the aim of universal education had not been reached by the late 1980s, particularly among females, despite the great improvements that had been made. Obstacles to meeting the government's goal included a high birth rate, a decline in infant mortality and a shortage of schools and qualified teachers. In 1973, Suharto, the second President of Indonesia, issued an order to set aside portions of oil revenues for the construction of new primary schools. This act resulted in the construction or repair of nearly 40,000 primary school facilities by the late 1980s, a move that greatly facilitated the goal of universal primary education.¹

1.1 Overview of education system in Indonesia

Education in Indonesia is the responsibility of the Ministry of National Education (MONE), formerly the Ministry of Education and Culture (MOEC) and Ministry of Religious Affairs (MORA). Indonesia has a 6-3-3-4 (primary, junior high school, senior high school, tertiary education) system. At the school level, education is divided into two major parts: formal and non-formal.

Formal education refers to a school education that encompasses teaching and learning activities that are gradual, hierarchical, and continuous, and covers education from pre-school to

¹ <http://countrystudies.us/indonesia/56.htm>

tertiary education². Both public and private schools are under formal education, which can be further divided into non-religious and religious (Islamic) schools. Both public and private non-religious schools are under MONE, while religious schools are under MORA. Based on Law 20/2003, formal education in Indonesia begins with kindergarten comprised of two years followed by primary school, which is made up of the first six grades. Graduates from primary school continue with secondary education, which is divided into junior and senior secondary levels, comprised of three grades each. Basic education level consists of primary (six years) and junior high school (three years). There are two types of schools at senior high school level: general academic and vocational training schools. Graduates from senior secondary schools can continue to diploma or undergraduate programs or to other types of higher education (with a different number of completion years that vary according to the program). This is then followed by the graduate level. There are religious (Islamic) schools at all levels of education.

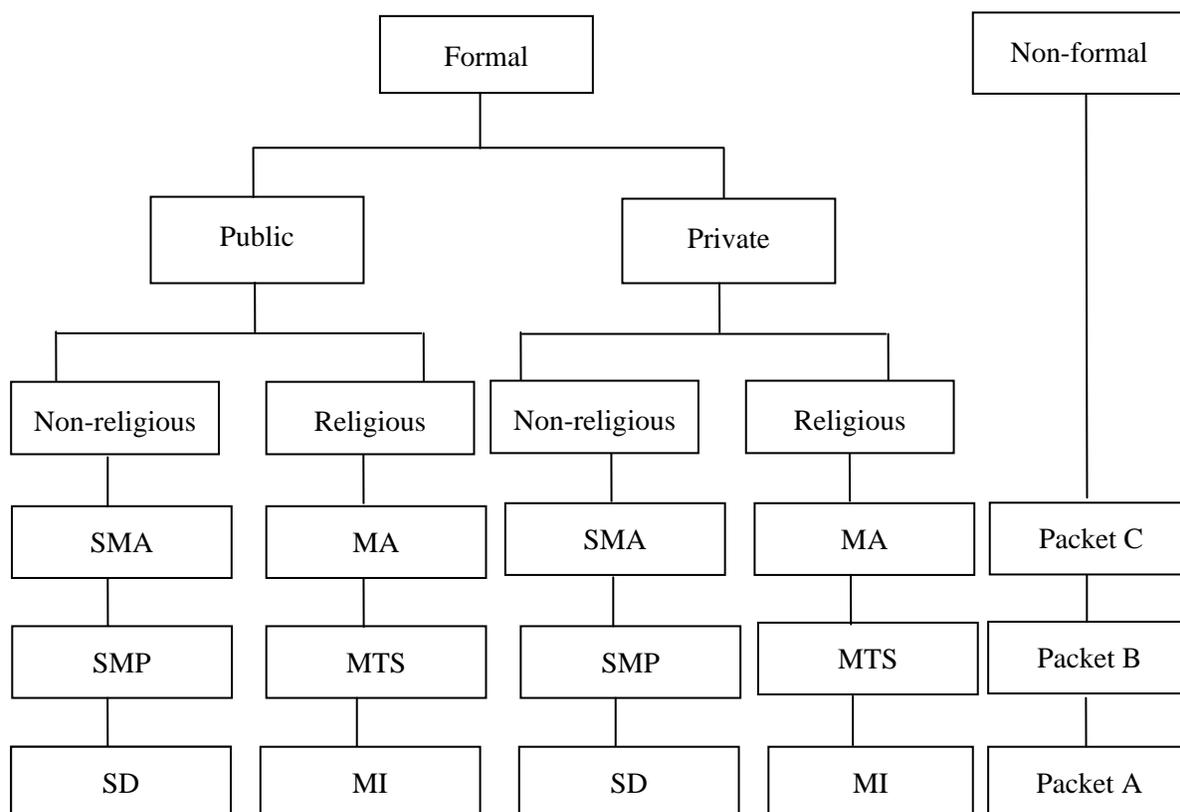
² Indonesian Constitution

Table 1: Education system in Indonesia

Age	Grade	Level	Institution			
24		Higher Education	Graduate school	University	Islamic University	
23				Institute		
22			Undergraduate		College	Islamic College
21					Polytechnic	
20						
19						
18	12	Middle Education	Senior High School (SMA)	Senior Vocational School (SMK)		
17	11					
16	10					
15	9	Primary Education	Junior High School (SMP)			C.E
14	8					
13	7		Elementary School (SD) Islamic Elementary School (MI)			Compulsory Education
12	6					
11	5					
10	4					
9	3					
8	2					
7	1					
6		Pre-early	Kindergarten (TK)			
5			Islamic Kindergarten (RaudhatulAthfal = RA; BustanulAthfal = BA)			
4						

Source: National education law 2003.

Figure 1: School structure diagram



Source: Author

Note: SD: Sekolah Dasar (Primary school), SMP: Sekolah Menengah Pertama (Junior high school), SMA: Sekolah Atas (Senior high school) MI: Madrasah Ibtidaiyah (Islamic primary school), MTS: Madrasah Tsanawiyah (Islamic junior high school), MA: Madrasah Aliyah (Islamic senior high school)

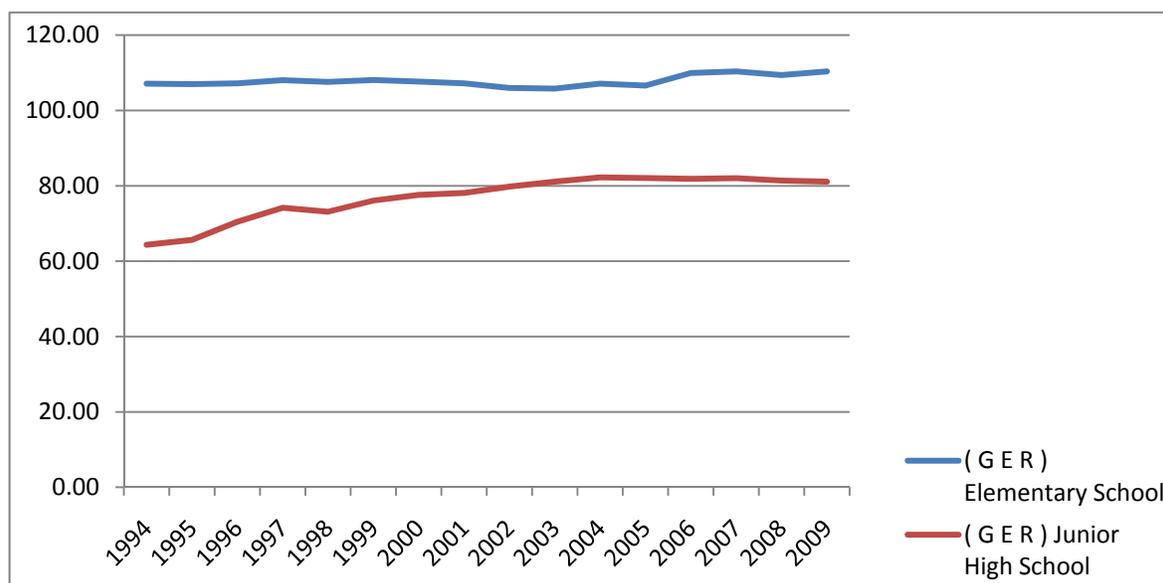
1.2 Compulsory education

Since 1950, the Indonesian government drafted a provision in the constitution to provide every Indonesian with at least a six-year primary education, but the goal to achieve universal primary education (UPE) was missed. By 1984, the government of Indonesia had fully implemented

the six-year compulsory education requirement. As the result of this policy, the participation rate in primary school reached 92% in 1993 compared to 79% in 1984. Ten years later, in 1994, the nine-year compulsory education system, covering the six years of primary schooling and three years of junior high school was launched, resulting in increase of enrollment rate at both primary and junior high school (See graphs 1 and 2).

Recent news in “The Jakarta Post”³ announced the intention of the Indonesian government to require 12-year compulsory education in 2014. However, there is no clear plan from the central government to implement 12-year compulsory education yet. The idea was the initiative of several local governments at the provincial level who want to expand their education quality. Those local governments are: Yogyakarta, Maluku, East Kalimantan, Riau and East Java.

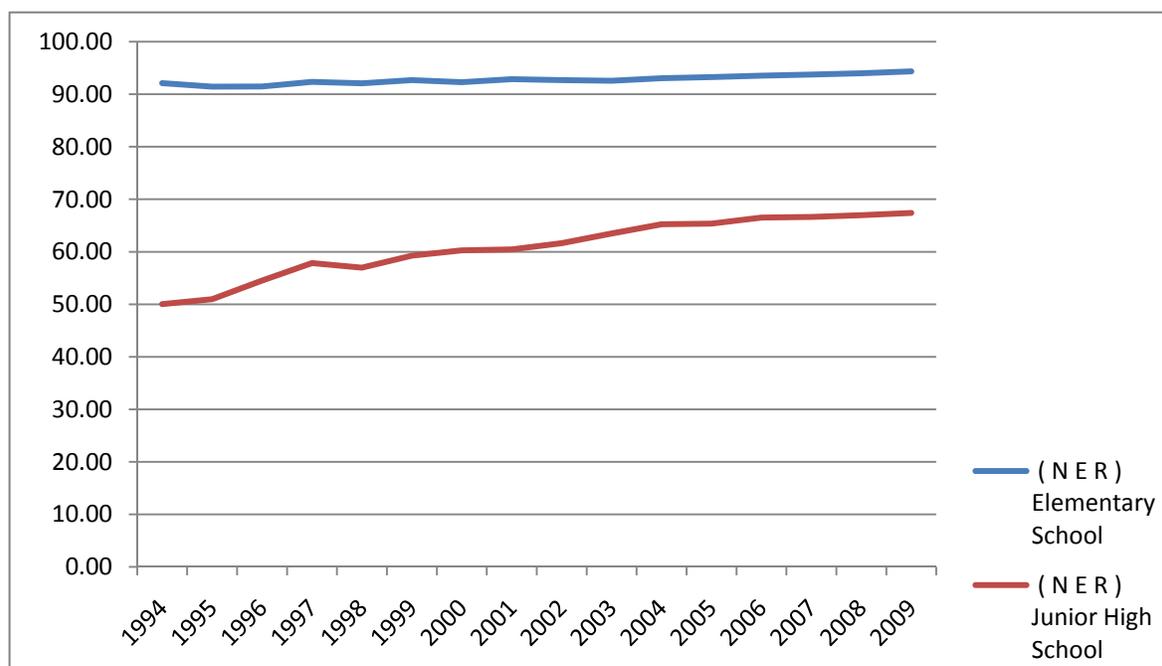
Graph 1: Gross Enrollment Ratio (GER) of elementary and junior high school from 1994 to 2009.



³ The Jakarta Post, 04 March 2010

Source: Statistics Indonesia

Graph 2: Net Enrollment Ratio (NER) of elementary and junior high school from 1994 to 2009.



Source: Statistics Indonesia

According to UNESCO (2007), the transition rate from elementary to junior high school is 90%. Despite an impressive increase in enrollment at the national level, regional differences remain significant. Although the enrollment at junior high school continues on a rising trend, it is still low compared to that of elementary school. There are four main causes for low enrollment at the junior high school level. First, household welfare level is a significant determinant. Second, children from Muslim families have a significantly lower probability of continuing to the secondary level. Third, children in areas with relatively abundant employment opportunities have a higher probability of giving up schooling. Fourth, girls have a significantly lower chance of continuing (Suryadarma D.,

Suryahadi A., Sumarto S, 2006, working paper). This shows that universal, nine-year basic education has not been achieved by the Indonesian government, even though it has been compulsory since 1994.

1.3 Educational decentralization in Indonesia

In the year 2000, Indonesia experienced a decentralized system, which provided some municipalities/ districts with rights to establish their own authorities under specific requirements. Although Indonesia's economy keeps growing, there exists an imbalance in economic development across the regions, which is assumed to be the result of the decentralized system. It is believed that the system has the potential to increase the social gap between the rich and poor across provinces/districts and this problem cannot be fixed unless the central government continues to provide adequate financial resources to the poor (Subroto, 2007).

According to the Education Law 20/2003, the principal responsibilities, authority and resources for the delivery of education are transferred to lower levels of government, while some decision-making power is transferred to schools (World Bank, 2004). The decentralized system in the education sector did provide the local authorities, which are closer to the schools, the ability to precisely and quickly determine what the schools need. Thus, efficiency and effectiveness became the main argument for decentralizing the education sector. In the past, due to the heterogeneity of cultures and ethnic groups and the large geographical scale of Indonesia, the central government most likely did not have sufficient knowledge of all local conditions. Lack of laboratory equipment and poor teacher distributions, for example, were the results of inefficiency and ineffectiveness inherent in the previous system (Subroto, 2007).

At the same time, however, not all the local governments were ready to develop the education sector using their own resources, while all of them have to follow the national goal of the nine-year compulsory basic education program. Thus, low student enrollment rates and untrained teachers, insufficient school facilities, etc., as well as weak financial resources, became critical factors for transferring responsibility for the education sector to the local authorities (Subroto, 2007). The same study of Subroto cited the argument of John and Morphet (1960), that the increase in quantity and quality of education generally should be followed by financial support; disparities in quality of education across districts were thus likely to become a new problem in Indonesia.

1.4 General information of Yogyakarta city

Yogyakarta City, also known as Jogja, Yogya, or Jogjakarta, is a city in the Yogyakarta Special Region, Indonesia. Comprised of 32.5 square kilometers, it is one of the Indonesian capitals from 1945 to 1949 (Indonesian National Revolution). Kratonor the Sultan's palace is the center of Yogyakarta City, surrounded by a densely populated residential neighborhood that occupies land that was formerly the Sultan's sole domain. The city is known as a center of classical Javanese fine art and culture, such as batik, ballet, drama, music, poetry and puppet shows. Because of its strong Javanese culture and tradition, Yogya is the second most important tourist place in Indonesia after Bali. In addition, it is also famous as a center for Indonesian higher education and very well-known as home of Gadjah Mada University, one of Indonesian's most prominent state universities. It is one of the most heterogeneous cities in terms of

ethnicities in Indonesia, with the largest Javanese population. Thus, the Javanese language is widely used as the daily spoken language, despite the Indonesian language being the official language.⁴

There are 192 primary schools and 65 junior high schools (both public and private and religious and non-religious). In this study, SDN Karangmulyo (primary school) and SMPN 9 (junior high school) were selected as research sites, representing urban schools.

1.5 General information of Bantul Regency

Bantul Regency is in the province of Yogyakarta Special Region, Indonesia. Like many regions on the island of Java, it is densely populated with roughly 1,600 people per square kilometer. It is bordered by the city of Yogyakarta to the north, the regencies of Kulon Progo and Sleman to the west, the Gunung Kidul Regency to the east, and the Indian Ocean to the south. This is also the birthplace of the former Indonesian President, Suharto.⁵ Due to the scarcity of natural resources and the aftermath of a strong earthquake (6.3 on the Richter scale) in May 2006, this area is less developed compared to Yogyakarta City. The local government of Bantul puts education as its main priority in order to develop human resources.⁶ As a result, there are 372 primary schools and 85 junior high schools (both public and private and religious and non-religious). In this study, SDN Wonolelo (primary school) and SMPN 3 Pleret (junior high school) were chosen as research sites, representing rural schools.

1.6 Profiles of the schools visited

1.6.1 Primary schools

⁴ [http://en.wikipedia.org/wiki/Yogyakarta_\(city\)](http://en.wikipedia.org/wiki/Yogyakarta_(city))

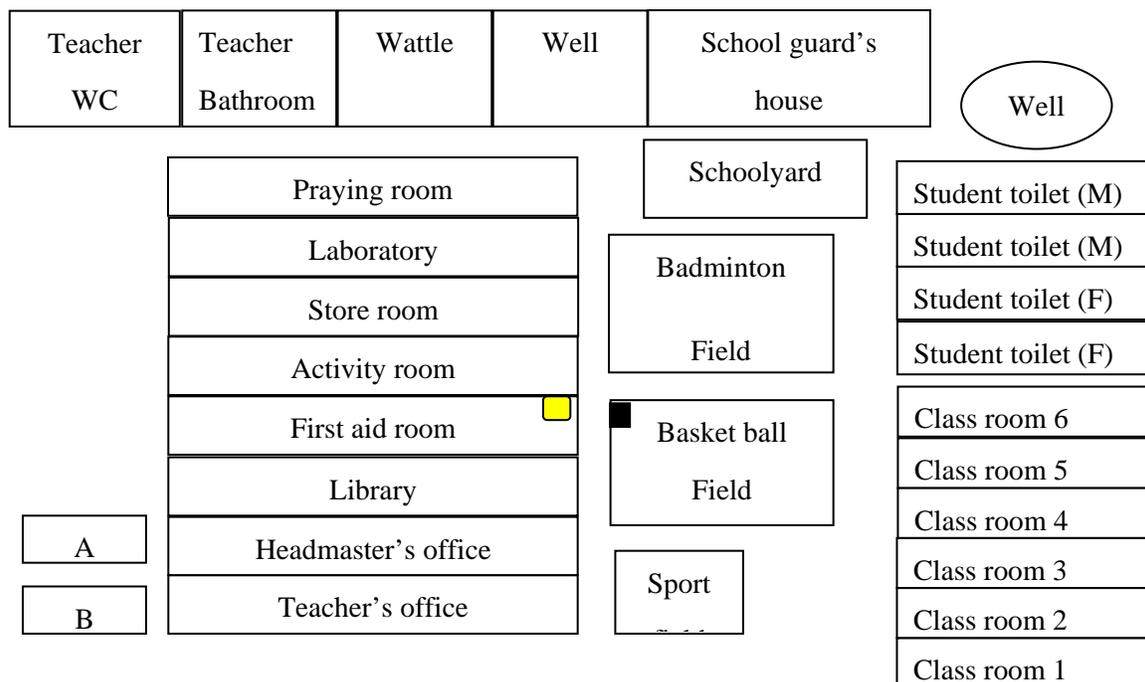
⁵ http://en.wikipedia.org/wiki/Bantul_Regency

⁶ Interviewed with Bantul department of education officials 20 September 2010

1.6.1.1 SDN Karangmulyo (2010)

This primary school is in Yogyakarta city. There are 18 teachers (12 females) and 4 supporting staff (1 female) to serve a total number of 150 students (69 females) for the year 2010. In addition to the six regular classrooms, there are math and science laboratories, a storeroom, an activity room, a first aid room, the headmaster's room, a teacher's room, a praying room, a library, and a small house for the school guard and teachers. There are also two computers for the students to use (see Figure 2 for details about the school facilities).

Figure 2: SDN Karangmulyo school map.



A, B = School house for teacher

 = Electric meter box

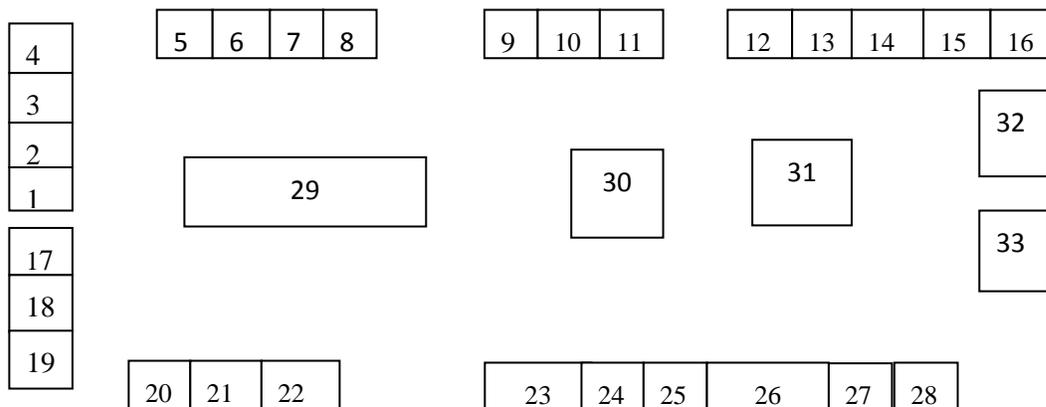
 = Flag

1.6.1.2 SDN Wonolelo (2009)

1.6.2.2 SMPN 3 Pleret (2009)

This junior high school is in Bantul Regency. There are 27 teachers and 13 supporting staff to serve a total number of 319 students for the year 2009. In addition to the 12 regular classrooms, there is a science laboratory room, a storeroom, an activity room, a creativity room, a first aid room, a library, the headmaster's room, a teacher's room, a computer room, praying rooms, a house for the school guard, and a multi-media room (See Figure 3 for details of the school map).

Figure 3: SMPN 3 Pleret map



1 = Headmaster room

9 =Class 8 C

2 =Administrative room

10=Class 8 B

3 =R. BP/BK

11=Class 8 A

4 =School coop

12=WC

5 =WC

13=Class 7 C

6 =Class 9 C

14=Class 7 B

7 =Class 9 B

15=Class 7 A

8 =Class 9 A

16= Audiovisual room

17=Security guard station	26=Activity room
18= R. UKS	27=Boy Scout room
19= Teachers' room	28= Activities room
20= Meeting room	29= Basketball field
21= Computer room	30= Volleyball field
22= Lab IPA	31= Praying room
23=Library	32=Canteen
24=Book store room	33=Canteen
25=Storage room	

2. Purpose of the Study

This study examines the impact of BOS (Batuan Operasional Sekolah- School Operational Assistance) and different kinds of scholarship programs for the four schools studied, in regards to school accessibility and school quality. The analyses will be based on secondary data and the perspective of the school principals, teachers, representatives of the school committee member and parents. It then proceeds to the authors' own analysis of the issue.

3. Methodology

Primary data is derived from the interviews with officials from the Department of Education in Yogyakarta City and Bantul Regency, school principals, teachers,⁷ representatives of school committee members for the four schools studied and parents.⁸ The secondary data was collected from various sources, such as documents from the Department of Education in

⁷ Three teachers from each school were interviewed.

⁸ There were 20 parents in the interview (15 parents are in Bantul District and among those, 5 of them have children studying in Yogyakarta City and 5 parents are in Yogyakarta City). These 20 parents range in economic status: high, medium, and low-income.

Yogyakarta City and Bantul Regency, books, research reports, previous studies, school documents, and other publications.

4. Scope and limitations of the study

The study focuses on only four schools: one primary school and one junior high school in Yogyakarta city,⁹ and one primary school and one junior high school in Bantul Regency¹⁰. The analysis of BOS budget¹¹ and scholarship programs of only four schools, with limited primary data, may not reflect the complete impact of educational finance on school accessibility and school quality of nine-year education as a whole. In addition, the analysis on school accessibility might not be accurate, due to missing enrollment data from these schools. With similar constraints, the analysis of school quality, without the proof of student learning outcomes is also inadequate. Time constraints and the authors' inadequate knowledge also limit the scope and the analysis of the issue.

5. Educational Finance in Indonesia

Law Number 20/2003 of the National Education System announces that every citizen aged 7–15 years must attend basic education, which implies that the government will provide free educational services to all pupils at the basic level of schooling. Also, Indonesia's Education For All Plan (2003-2016) has a target of reaching 100 percent gross enrollment rates at the primary school level and 96 percent at the junior secondary school level by 2009. To achieve these enrollment targets in education, coupled with investments in improving the quality of education, it is essential to sustain Indonesia's growth and competitiveness in the region for the years to come. Efficient and effective education spending will thus be a central element of Indonesia's poverty reduction strategy.

Indonesia's past enrollment expansion closed the gap across income groups at the primary education level, but striking inequalities remain at the junior and senior secondary levels. Problems with access become more significant at the junior secondary school level, where there is a considerable divergence in enrollments among different income families. A child coming from a poor family is 20 percent less likely to be enrolled in junior high school than a non-poor child.¹² Officially, basic education (grades 1–9) is compulsory for children aged 7–15, but the main

⁹ SDN Karangmulyo (primary school) and SMP Negeri 9 represent urban schools.

¹⁰ SDN Wonolelo (primary school) and SMP Negeri Prelet 3 represent rural schools.

¹¹ The actual amount of BOS budget in each school was not accessible.

¹² World Bank, Poverty Assessment (2006)

issue in terms of access to education concerns the transition to junior secondary schooling. Thus, in order to successfully achieve universal basic education, the Indonesian government has tried to cover education expenses as much as possible by abolishing registration fees at the primary and junior high school levels.

Both the central government and regional governments are responsible for education. According to Law No. 32/2004 on Regional Government Administration, education is an obligatory function for regional governments, both provincial and *kabupaten/kota*¹³, and for that reason, regional governments are obliged to manage and finance education. From 2001 to June 2005, the government allocated part of its fuel subsidy savings to a scholarship program (known as BKM) for poorer families. School operational costs have come from a number of sources, primarily from students via student tuition and various other forms of levies, from the central and regional governments, and other sources including community contributions, business establishments, and other donors. The availability of school operating funds varies between regions, even between schools in the same region. This diversity is affected by the capability and commitment of regional governments and the community in supporting school activities. For that reason, there are schools that have very well-equipped educational facilities, which are supported by large budgets, but there are also schools with very minimal equipment and their budgets are actually inadequate for covering the operational needs of the school (Widjajanti I. Suharyo et al., 2006).

A new financing mechanism, introduced in 2005, significantly altered the composition of operational revenue sources at the school level, by allocating resources directly to schools. For the period July–December 2005, the Indonesian government decided to change the direct recipient of the funds from households to schools by allocating block grants for school operational costs through the Operational Aid to Schools (School Operational Assistance) Program (Bantuan Operasional Sekolah, or BOS).

5.1 BOS Policy

Since July 2005, the Indonesian government grants BOS resources to all schools at the primary and junior secondary levels. The BOS program is distributed to schools based on a per-pupil allocation mechanism.¹⁴ The BOS program covers approximately 41 million students, of

¹³ City

¹⁴ Ministry of National Education (MONE, 2005)

which 62 percent are at the primary school level and 38 percent at the junior secondary level.¹⁵ Schools set up bank accounts in which the funds are directly deposited, reducing the possibility of leakage and providing greater transparency.

BOS funds are to cover operational costs and are intended to thereby lower or even eliminate school fees. There are guidelines on the use of the funds, but the schools still have a fair amount of discretion on how the funds are spent. Schools in which the total amount collected in school fees is lower than the amount received in BOS grants are mandated to eliminate school fees all together. Schools that collect more in school fees are supposed to eliminate fees in an amount equivalent to the grant received, while giving priority to poor students. This latter provision avoids discouraging schools with fee collections higher than BOS from receiving the grant. The reason is that if these schools were also required to completely eliminate school fees, the grant would actually lead to a decrease in the operational budget.

Initially, primary schools received Rp. 235,000 per pupil per semester, and junior secondary schools received Rp. 324,500 (MONE, 2006). The government debated the level of the grant, as MONE requested an increase for primary students to Rp. 300,000 and for junior secondary students to Rp. 420,000, due to the fact that the current numbers are based on unit cost calculations at 2003 fixed nominal prices. Also, what is problematic is that the amount per student is set nationally and does not take into account regional price fluctuations. Later on, the grant was adjusted accordingly and there was an increase in the amount of BOS budget to both primary and junior high schools, with different distributions for schools in the city and in the district (See Table 2 for the details of BOS grant to primary and junior high school).

Table 2: The grants of BOS budget to primary and junior high schools (2009)

Primary school (SD/SDLB)		Junior high school (SMP/SMPLB/SMPT)	
Schools in city (Di Kota)	Schools in district (Di Kab)	Schools in city (Di Kota)	Schools in district (Di Kab)
Rp 400.000 per student	Rp 397.000 per student	Rp 575.000 per student	Rp 570.000 per student

Source: BOS Booklet 2009

¹⁵ Ministry of National Education (MONE, 2006)

5.2 Scholarship programs

Indonesia experienced an economic crisis in 1985/1986 and again in 1997/1998, which inevitably negatively affected the education sector. In order to avoid a repeat of the fallout of the 1985/1986 crisis, which resulted in a high number of student dropouts, the Indonesian government has mobilized substantial resources from the annual rupiah budget and loan funds from the World Bank and the Asian Development Bank (ADB) to launch nation-wide scholarship program for primary and secondary schools. The program is called the Scholarship and Grant Program (SGP) and consists of two components: scholarships for students and block grant for schools. The program's objectives are to maintain pre-crisis levels in two areas: enrollment and quality, for both basic education (primary and junior secondary) and senior secondary schools¹⁶.

According to the interview with officials¹⁷ from the office of the provincial government of Yogyakarta Special Region, there are four main types of scholarship programs for schools in this province:

- (a) Scholarships for special achievement in academics, sports, arts, etc.
- (b) Scholarships for students from poor families at all levels (from primary to senior high school).
- (c) Retrieval scholarships aimed at those who have dropped out of school.
- (d) Scholarships aimed at students vulnerable to dropping out (for senior high school students only).

Noticeably, there are different kinds of scholarships available at different schools, as we can observe from the four schools visited.

. SDN Karangmulyo (primary school in Yogyakarta City):

- (a) JDP: Education Security Net program:

This scholarship is for students from poor families with welfare cards.¹⁸ The quota for each year is 61 students, but it changes according to the budget¹⁹ available.

¹⁶ For the details of this scholarship program refer to National Development Planning Agency (Bappenas), Republic of Indonesia (2001).

¹⁷ Interview on 20 September 2010.

(b) Poor scholarship program:

This is also a scholarship for the poor students, but it doesn't limit its application to only those from families with welfare cards. Teachers select students in their class and meet together to discuss appropriate candidates for the scholarship (7 students). The amount of the scholarship is Rp360.000/year per student.

(c) BAZDA program:

This scholarship is given by the Islamic community and targets 15 students (Rp 150.000/student) per academic year. The school proposes the target students but the selection is done by the local government.

. SDN Wonolelo (primary school in Bantul Regency):

(a) Special achievement (academic achievement) scholarship program:

This scholarship is for students with high academic achievement and is granted by the provincial level of government. Only one student in the school is selected to receive the scholarship of Rp 240.000 per semester.

(b) Poor scholarship program:

The grant for this scholarship is from the local government and in the amount of Rp 360.000 per year. To select students for the scholarship, the school has to collect the student's family identification cards and send them to the head of the village. There were 16 students in this school who received this scholarship in 2009.

(c) GNOTA national movement for orphanage students scholarship program:

The grant for this scholarship is Rp 120.000/year per student. There were three students who received this scholarship in 2009.

¹⁸ To receive the welfare card the family has to apply to the local authority and there are certain indicators to identify that the family is really poor.

¹⁹ The budget is from the central government, 165.000 rupiah/ year

. SMPN9 (junior high school in Yogyakarta City):

(a) Best performance in academics or sports scholarship program:

The Department of Education provides grants of Rp 600.000 per year for this scholarship program and two students were selected in 2009; one for achievement in science and one for the sport Tae Kwon Do.

(b) Scholarships for those vulnerable to dropping out:

The school collects all students' family backgrounds and checks their family condition. The next procedure is to submit the data to the Department of Education, which provides the grants. There were 95 students selected in the year 2009. These students receive the scholarship until they graduate. Each student received Rp 535.000 in 2009 but the amount was increased to Rp 550.000 rupiah/student in 2010.

(c) Scholarships for poor students from families with welfare cards:

There were 85 students who received this scholarship with the grant of Rp. 250.000 per year.

(d) Special scholarship program for orphanages:

The grant for this scholarship program is funded by voluntary donations from the school and parents. Twenty students have received it so far, but the number of students will change based on the money collected every semester.

(e) Scholarships from private companies or NGOs:

This is a special scholarship program for this school, which receives grants from private companies, NGOs and/or individuals who assist the school. The grant provider selects the students eligible for the scholarship and the school facilitates the process with such things as information distribution. The amount of the grant is Rp1.5 million/year.

(f) Scholarships from the Islamic community:

Twenty students were selected in 2009 for grants from the Islamic community. The religious (Islamic) community donates 1 billion rupiah per semester to this school and each students elected for the scholarship receives a grant of Rp 400.000/year.

. SMPN3 Pleret (junior high school in Bantul Regency):

(a) Retrieval scholarship program:

The grant for this scholarship is from the local government in the amount of Rp 375.000 per year. There were 4 students who received the scholarship in 2009.

(b) Poor scholarship program:

This scholarship is also from the local government, Department of Social Affairs. To decide which student will receive the scholarship, a counselor will collect the family data and observe the student's situation. The grant for scholarships is different based on the grade of the students. Students from grade 7 and 8 would receive Rp 531.000/year, while those from grade 9 receive only Rp 265.000/year. There were 22students who received this type of scholarship in 2009.

6. Analysis

The Indonesian government's efforts toward the education sector has been significantly improving the enrollment rate of primary and junior high school as a whole at the national level since the year 2000 (see graph 1 and 2). The following section discusses the impacts of BOS policy and scholarship programs for the four schools visited in regards to school accessibility and school quality.

6.1 School accessibility

According to the government policy, in every sub-district there is at least one junior high school and in every village there is at least one primary school. However, education is not only the responsibility of the government; some other non-government agencies have opened private schools in order to absorb the rapid growth of the Indonesian population. According to Table 7, there is a substantial number school in Yogyakarta City and Bantul Regency. According to the interview with officials²⁰ from the Departments of Education in the two areas, these regions are considered as the

²⁰ The interview was conducted on 21 September 2010 in Yogyakarta City and 24 September 2010 in Bantul Regency.

home of education for Indonesian people. Yogyakarta City, being notable for its education programs, has gained much attention from the government and help to develop this sector. The aforementioned, Bantul Regency's overall development target is the development of human resources, thus the quality of education is maintained. Generally, in developing countries lack of school buildings is one of the major issues when considering problems of school accessibility. However, it is reported by the Department of Education officials in both Yogyakarta City and Bantul Regency that this is not the case in these areas.

Table 7: The number of villages and primary and junior high schools in Yogyakarta City and Bantul Regency.

Yogyakarta City				Bantul Regency			
Number of villages	Number of primary schools	Number of sub-districts	Number of junior high schools	Number of villages	Number of primary schools	Number of sub-districts	Number of junior high schools
45	192	14	65	75	372	17	85

Source: National Department of Education of Municipality of Yogyakarta and National Department of Education of Bantul Regency (2010).

The school accessibility in these two regions is generally good (see Table 8). Almost all school-age children are registered in schools in both primary and junior high school levels. Nevertheless, there are wide gaps between the numbers of students enrolled in junior high schools for both areas is still significant.

Noticeably, in Yogyakarta City the school-age population is less than the number of enrollment. The official of Department of Education in Bantul said that there are two main reasons to explain this phenomenon. The first is that most of the parents simply think that the quality of education in the city is better than the rural areas; therefore it is very reasonable for them to send their children to Yogyakarta to continue their education at junior high school. To prove this case, five parents ²¹ who reside in Bantul Regency and send their kids to schools in Yogyakarta City were interviewed. They all shared the idea that schools in Yogyakarta City have a higher quality than those in Bantul. This is a significant concern for the government of Bantul Regency to consider and to develop the quality of education, especially since human resource development is the major concern of the government in this regency. The second reason reported is that there are also students who are under and over school-age enrolled in junior high schools in Yogyakarta City.

Table 8: School-age population and enrollment number of students in Yogyakarta and Bantul.

Yogyakarta City				Bantul Regency			
Primary school		Junior high school		Primary school		Junior high school	
School-age population (7~12)	Number of students enrolled in school	School-age population (13~15)	Number of students enrolled in school	School-age population (7~12)	Number of students enrolled in school	School-age population (13~15)	Number of students enrolled in school
46,521	45,952	22,352	22,762	73,890	70,898	34,011	29,051

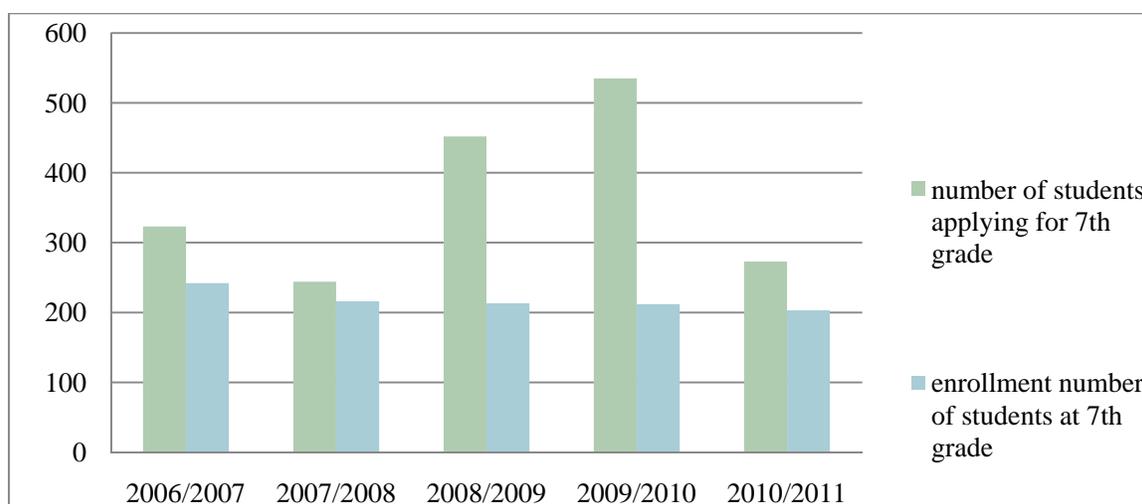
Source: National Department of Education of Municipality of Yogyakarta and National Department of Education of Bantul District (2010).

Surprisingly, if we look at the case of enrollment of junior high schools at grade 7 in SMPN 9 (Yogyakarta City) and SMPN 3 Pleret (Bantul Regency), there is a significant difference (see Graph 3 and 4). The SMPN 9 has nearly double the amount of students enrolled compared to that of SMPN 3 Pleret since the academic year 2006/2007. The simple reason to explain this phenomenon is that SMPN 9 has 5 classrooms more than SMPN 3 Pleret. This could allow SMPN 9 to absorb more students. In addition, SMPN 9 has more scholarship programs compared to SMPN 3 Pleret as

²¹ The interview was conducted on 28 September 2010 in Bantul regency.

explained in the scholarship section. This could be one of the attractions for students to study at this school rather than in SMPN 3 Pleret, as it is believed that scholarships also increase the accessibility of the students from poor family backgrounds. Furthermore, of the two schools we visited, SMPN 9 ranked 5th in the city²² while SMPN 3 Pleret is not highly ranked. Even so, the SMPN 3 Pleret can still be considered more popular than other schools in the region, as determined by the increase in the number of students applying to this school in the last two academic years. However, these two schools share the common constraint of a limitation of classroom and school facilities as shown in graph 3 and 4. SMPN 3 Pleret rejected nearly half of the students who applied every year, which is much more than that of SMPN 9. Nevertheless, the number of grade 7 enrolled in these two schools remains steady for the last five academic years, which is a good sign of school accessibility.

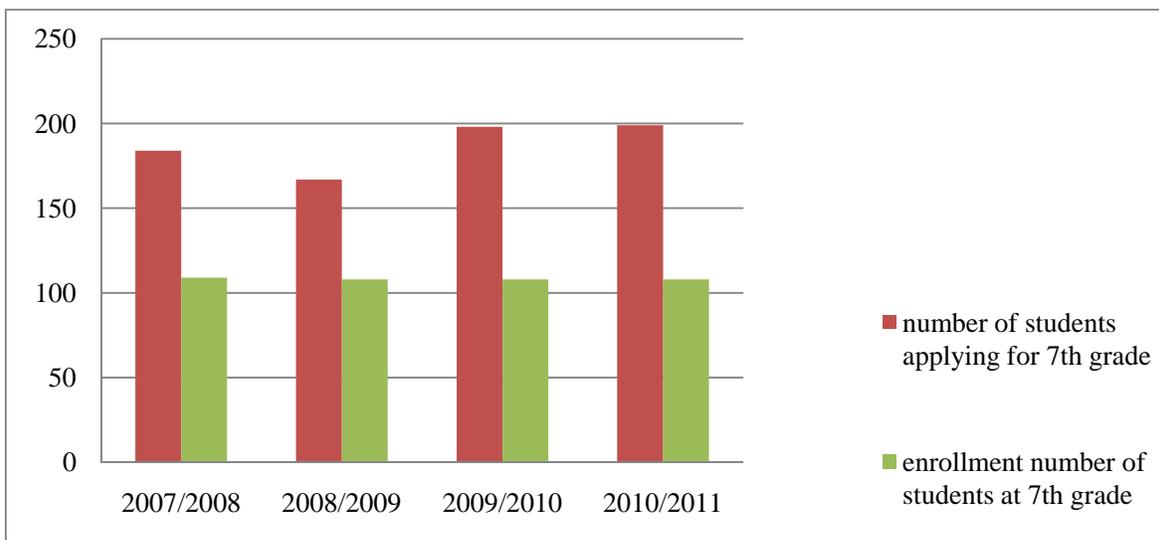
Graph 3: The number of students enrolled in SPMN 9 from 2006-2010



Source: SMPN 9 school document, Yogyakarta City.

Graph 4: The number of students enrolled in SPMN 3 Pleret from 2007-2010

²² Dinas Pendidikan Kota Yogyakarta : INFO RATA-RATA DAN RANKING SMP BERDASARKAN HASIL NILAI UN THN 2009



Source: SMPN 3 Pleret school document, Bantul Regency

Registration fee is not charged in the four schools visited, as these schools are implementing BOS policy.²³ When asked about the parents' opinion about "until what level they can support their children to school," the parents revealed hopes that they can do so at least up to senior high school because the school fee is free²⁴. One parent said that their two kids, who are now studying at SDN Karangmulyo, received scholarships. Thus, they are not worried much about education costs. In this regard, BOS policy and scholarship programs do enhance the chance of children from the poor families to go to school.

In addition to educational finance issues, it has been a common belief that school location can be one of the factors that affect the school accessibility. In this sense, the teachers²⁵ of the visited schools confirmed that distance of the school from their house made the students less motivated to come to school. However, it seems to be contradictory to the parents view. Ninety percent of the parents interviewed said that they are satisfied with the school location, as it is convenient for their children to commute to school, especially for those who have kids studying at

²³ This policy helps to reduce household expenditure on school fees across income levels.

²⁴ Interview with 5 parents from low-income family on 23, 27, and 28 September 2010.

²⁵ Interview with three teachers from each school visited (12 teachers in total) on 22, 23, 27 and 28 September 2010.

primary school²⁶. Thus, school location is not the problem in the Yogyakarta City and Bantul Regency.

6.2 School quality

This section examines the quality of the schools examined by assessing five components: teacher qualifications, teacher training programs, teacher monitoring systems, teacher incentive schemes, and school facilities and activities.

6.2.1 Teacher qualification

Many developing countries face difficulties in providing good qualified teachers across the country and Indonesia is no exception. Generally, teacher salaries are relatively low compared to that of other jobs, which can lower teachers' motivations toward teaching. Thus, it is common for teachers to have second jobs. Also, in response to the expansion of school accessibility and to cover the insufficient number of teachers, poorly qualified teachers is hired in many developing countries. These elements negatively affect the teaching quality, which results in low quality of education. Thus, the requirements to become a teacher in order to guarantee the minimum teaching levels influence the teacher quality significantly.

Each school we observed during the fieldwork sets the level of civil servant as the requirement to be a teacher. In Indonesia, the requirement to be a civil servant is to pass the national exam for that particular field. This means that every civil servant teacher has at least the standard teaching knowledge to be qualified to become a teacher. According to the interview with teachers at the four schools visited, all have the required qualification from the school and have worked for at least 10years²⁷. Surprisingly, the teachers interviewed did not complaint about their salary. They said it is enough to partly contribute to family income. Notably, some of them have second jobs besides working in the school.

We cannot accurately judge whether the teaching quality is good or bad, but we can roughly assume that they have enough qualification to be a teacher²⁸. In addition, it is assumed that because they are experienced teachers that they are able to maintain second jobs without letting them

²⁶ Twenty parents were interviewed on 22, 23, 27 and 28 September 2010. Five parents reside in Yogyakarta City and 15 parents are Bantul residents.

²⁷ Almost all the teachers interviewed have worked for the schools more than 10 years.

²⁸ We couldn't conduct classroom observation during the fieldwork due to time constraints.

interfere with their classroom preparation. However, it is worth to investigate whether they continuously receive in-service training.

6.2.2 Teacher training

Teacher training (in-service teacher training) is a highly important factor to maintain and improve teachers' skill because teaching contents keep changing to reflect the new demands from society. Therefore, teaching methodology and skills also have to be updated to keep up with the changes. Moreover, the training for teachers who have been in service for a long period is essential.

The four schools we visited have some systems for teacher training, both regular and irregular. SMPN 9, the junior high school in Yogyakarta City, provides administrative training at the beginning of every new academic year. Also, subject training, i.e., computer and English, are held irregularly. There are additional workshops or seminars for teachers, but they have to bear the cost for these outside opportunities. On the other hand, SMPN 3 Pleret, the junior high school in Bantul, holds a teacher meeting once a month to provide the opportunity to share experiences among all teachers. Similar to SMPN 9, this school also provides chances for teachers to attend outside workshops but teachers have to pay the attendance fee. In SDN Karangmulyo, the primary school in Yogyakarta City, only new teachers receive administrative training, and there are no regular meetings provided. Although other schools seem to have insufficient training systems, or only focus on administrative training, SDN Wonolelo, the elementary school in Bantul, has a teacher discussion group, which aims to allow regular sharing of teaching methodologies. Also, the school has a special budget for supporting teachers to attend outside workshops or seminars in order to attain teaching skills. It is significant that this school, in cooperation with the local government and universities, helps teachers to attain higher levels of education.

As mentioned earlier, the training for in-service teachers in each school is mostly limited to administrative training, and there is no financial support from schools to attend outside workshops or seminars, except the primary school (SDN Wonolelo) in Bantul. Most of the teachers feel anxious about insufficient training opportunity and desire to be trained more in order to be able teach better. Generally, we can say that there is a lack of in-service teacher training to upgrade teaching skills.

6.2.3 Teacher monitoring

A teacher monitoring system is essential to observe teacher performance inside the classroom. Training alone is not sufficient to improve the quality of teachers, but monitoring the effective application of skills acquired from trainings is important as well.

Every school we visited has regular teacher observation at least once per semester. These observations do not affect teacher's salary. After the observation, the head teacher gives advice or comments to help the teachers improve their teaching skills. The monitoring system in DN Wonolelo, a primary school in Bantul is different from the other three other schools visited. The school principal invites a school inspector from the local government to do teacher observation. It was apparent that each school provides a monitoring system to observe teacher performance and teachers receive advice or suggestions from the head teachers. In short, we can assume that teaching process is closely observed by the schools to ensure the teaching standard.

6.2.4 Teacher incentives

As mentioned above, teacher salaries are normally low in developing countries, thus many schools face difficulties to maintain and improve teacher motivation. During the fieldwork, we observed the various kinds of incentive systems that each school provides to the teachers. SDN Karangmulyo, the elementary school in Yogyakarta City, provides an annual bonus for all teachers, and also extra bonuses from the local government for good performance. In SMPN 9, the junior high school in Yogyakarta City, the bonus is provided based on the students' academic achievement. Also, a bonus is given to the best performing teacher (teaching quality, language ability, knowledge etc.) in SDN Wonolelo, the elementary school in Bantul. For SMPN 3 Pleret, the junior high school in Bantul, all teachers receive a monthly bonus from the local government. However, the teachers interviewed expressed no excitement regarding the incentives they receive. From this observation we determined that the bonus or incentive money added to their salary is not enough to motivate the teachers.

6.2.5 School facilities and activities

To provide a good quality education, school equipment and facilities must be maintained in good condition. Here we define school equipment and facilities as the school building itself, computers, library, and science laboratory and so on. Without sufficient facilities or equipment in school, good quality education won't be achieved, even though the school provides good quality teacher training.

All four schools we visited have similar equipment and facilities and they seem to be maintained in good condition, as each school has a person in charge of cleaning or the students have duties to clean their classrooms²⁹. However, we observed a serious problem regarding the budget for school equipment and facilities. Before the implementation of BOS policy, schools had autonomy to raise funds from the parents through a school committee,³⁰ thus if additional funds for repairing or introducing new equipment were needed, the school could flexibly call for funds. However, after the enforcement of the law, a new regulation forbids schools from fundraising from parents. This regulation makes it difficult for schools to maintain and upgrade the equipment and facilities with limited budgets. The significant problem we found was the fixed budget from BOS is not sufficient, especially for the schools³¹ located in rural areas of Bantul.

This was apparent from the interview held with the school administration.³² They said that the school couldn't afford to repair a damaged roof. Furthermore, insufficient equipment is also one of the significant issues. In addition to that many teachers were anxious about this issue because they think educational equipments/facilities must constantly be upgraded to catch up with changing curriculum, such as ICT (Information and Communication Technology) products. A teacher in SDN Wonolelo, a primary school in Bantul, warned the situation that the school is facing; there are only two computers in the school and it is absolutely a burden to purchase new ones. The main cause for this is the limited budget from BOS.

Another serious problem regarding limited budgets is the reduction or discontinuation of school events due to the difficulty of raising funds from parents. We heard from the interviewee³³ from SMPN 3 Prelet (Bantul) that the school doesn't provide any school excursions or religious ceremonies at the moment, though they were held before the implementation of BOS. SDN Wonolelo (Bantul) also eliminated study tours, and reduced managerial skill training for teachers. It is problematic because these outside school events help students to learn many things that can't be

²⁹ The school facilities were listed in the school profile section.

³⁰ According to the interview with the representatives of school committee members we can say that after the implementation of BOS policy, school committees have been inactive in school planning discussions.

³¹ The concern was raised up by the school administration of the visited schools in Bantul.

³² Interviews were held on 22, 23 September 2010 in Yogyakarta City and on 27, and 28 September 2010 in Bantul Regency.

³³ The school administration officials.

attained by daily school curriculums. In addition to these, schools have to work more on administrative tasks in terms of financial report preparing.

Insufficient budget to maintain/update school facilities or equipment has been a significant burden for schools in Bantul. Many teachers deplore conditions where facilities can't be repaired because of the limited budget. Also, new regulations of BOS forbid the introduction of new facilities from the operational budget. Lack of flexibility in raising funds for school activities reduced students' opportunity of learning from outside of the school. It affects the student's learning profundity, because they have no opportunity to learn outside the classroom, nor are they able to apply skills and knowledge that enrich lessons learned inside the classroom.

Beside the close observation of the factors that affect the quality of the school, we also interviewed 10 parents³⁴ in Bantul who send their children to school. Six out of 10 interviewees reported that their priority requests for the school are the improvement of school quality. Among those, parents who from medium to upper middle income families send their children to private courses (additional tutorials) or intend to change schools for their children to Yogyakarta City when they finish primary school because they feel that the school quality in their area is not reliable. In addition, we also had chance to talk to five additional parents³⁵ who have already sent their children to school in Yogyakarta City because they think the schools in Yogyakarta City provide better quality education than schools in Bantul.

7. Conclusion

BOS policy and scholarship programs do accelerate school accessibility, which generally maintains a healthy student enrollment. As evidenced from the four schools visited in Yogyakarta City and Bantul Regency, the enrollment is on the right trend for achieving universal basic education (9 years). However, the low number of students enrolled in junior high schools in Bantul Regency should be a real concern for the local government of this area and as a result, school quality should be reconsidered. Also, limitations in the number of classrooms at junior high schools should be taken into account, along with the growth in number of primary graduates in both areas.

Disparity in school quality is still significant between schools in urban and rural areas. Regarding the issue of school quality, some challenging issues were revealed. A lack of

³⁴ The interviews were held on 27 and 28 September 2010 in Bantul Regency.

³⁵ The interview was on 28 September 2010 in Bantul Regency.

opportunities for in-service teacher training, a lack of flexibility for fundraising and the gap in terms of BOS budget allocations to schools are some examples discussed in this study. This could be confirmed by interviews held with parents who stated that inequity of school quality between schools in Yogyakarta City and Bantul Regency is obvious. As mentioned in the earlier section of this report, BOS policy was established to ensure that compulsory education be available for all Indonesian people by abolishing school fees. This goal is being attained, and enrollment has gradually risen across the country. However, there is a negative side of BOS financing systems on school quality, as discussed above.

To achieve complete compulsory education (9 years) nationwide, quality of education shouldn't be neglected. Even though the access to school has greatly expanded in the last five years, school quality has become the more problematic issue. BOS policy and scholarship programs for each school, have obviously played a great role to attract students to attend. However, it may take a long time before ensuring a high quality of education for all.

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School Profile:

SDN Karangmulyo, Yogyakarta city (2010)

SDN Wonolelo, Bantul regency (2009)

SMPN 9, Yogyakarta city (2010)

SMPN 3 Pleret, Bantul regency (2009)

Working Group 3

Administration

**Disaster risk reduction in Bantul:
Organizational measures and people's
awareness of these measures**

1. Introduction
2. Findings
3. Arguments
4. Limitations
5. Conclusion
6. Appendix
7. Acknowledgement
8. References

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LIST OF ABBREVIATIONS

ASB	Arbeiter-Samariter-Bund
BAKORNAS	The National Coordinating Board for the Management of Disaster
BAPPEDA	Badan Perencanaan Pembangunan Daerah
BAPPENAS	Badan Perencanaan dan Pembangunan Nasional
BLPT	Balai Latihan Pendidikan Teknik
BNPB	Badan Nasional Penanggulangan Bencana
BPBD	Badan Penanggulangan Bencana Daerah
CHF	Cooperative Housing Foundation
CWS	Catholic World Service
DFID	Department for International Development
DMC	District Management Consultant
DRR	Disaster Risk Reduction
EPH	Earthquake Proof Housing
FAO	Food and Agriculture Organization
GTZ	German Society for Technical Cooperation
IOM	International Organization of Migration
IRE	Institute of Research and Empowerment
JICA	Japan International Cooperation Agency
JRF	Java Reconstruction Fund
KESBANGLINMAS	Kesatuan Bangsa dan Perlindungan Masyarakat
KYPA	Komite Yogyakarta untuk Pemulihan Aceh
NGOs	Non Governmental Organizations
NMC	National Management Consultant
RT	Rukun Tetangga
RW	Rukun Warga
SMEs	Small and Medium-sized Enterprises
UGM	Gadjah Mada University
UN	United Nations
UNDP	United Nations Development Program
UNICEF	United Nations Children's Emergency Fund
YP2SU	Yayasan Peningkatan dan Pengembangn Sumberdaya Ummat

1. Introduction

1-1 Background

In 2006, an earthquake occurred in Bantul region, Yogyakarta province, Indonesia. To analyze organizational measures toward the earthquake, this section first considers a general framework for Disaster Risk Management policy. Also, it would be important to make sure general conditions of public administration in Indonesia in order to look at the event from an administrative aspect. Therefore, this section second thinks about decentralization of Indonesia that has been promoted since the late 1990s, because it has particularly had a great impact on public administration. Finally, this section goes on to examine the earthquake in 2006 in detail.

1-1-1 Disaster Risk Reduction (DRR)

According to Kimura (2008), there are four aspects for the establishment of an anti-disaster system. These are 1) physical infrastructure, 2) administrative infrastructure, 3) social infrastructure and 4) knowledge and information infrastructure. Their functionality depends on the daily activities of public administration. For the physical infrastructure, there are warning systems, communication systems by radio, subsidies for reinforcing houses and the like. For the administrative infrastructure, the arrangement of various laws such as the Basic Law on Anti-Disaster Measures, specialized research committees, anti-disaster trainings in both private companies and schools are included. For the social infrastructure, the establishment of local anti-disaster systems by communities and anti-disaster broadcasting systems by the media are involved. For the knowledge and information infrastructure, the provision of anti-disaster training in schools, the creation of a website, the establishment of anti-disaster centers and the expansion of publications need to be proliferated in order to enhance people's awareness about disaster.

According to Prof. Meguro (2007) from Tokyo University, who specializes in the field of anti-disaster, 95% of the total victims of the Great Hanshin earthquake died due to the collapse of their housing. Therefore, disaster proofing, as related to the improvement of structures, or the "hard aspect," should be important. Also, for the reinforcement of housing, support in the form of government subsidies is limited, so self-help by citizens is needed to build damage resistant housing with an awareness of disaster prevention. Thereby, disaster education, that is, "soft aspect" should also be promoted.

1-1-2 Decentralization in Indonesia

After the end of President Suharto's regime in 1998, the Indonesian government introduced decentralization policies, which mainly aimed to maintain national territorial integrity, improve public service delivery, and make regional governments more accountable. Decentralization is supported by the belief that local governments are more familiar with the needs of local people, therefore can provide appropriate public services. The challenge for the Indonesian governments under decentralization is to maintain the right balance between respecting local autonomy and ensuring national objectives.

There have been problems under the process of decentralization. Unclear distribution of functions between the central and regional governments used to cause rivalries between the Ministry of Home Affairs and the Ministry of Finance. In addition to this, exploitation of natural resources has also a big issue under decentralization.

Therefore, effective decentralization with a clear division of roles and responsibilities of the central and local governments is essential in designing and implementing protective measures that support individuals, households and communities.

1-1-3 Damages by the earthquake in Yogyakarta in 2006

In 2006 May 27th, an earthquake occurred in Yogyakarta province, then more than 5,700 people died, more than 30 thousand people got injured and 200 thousand houses were destroyed (Resosudarmo, 2008). Table 1 shows the actual damages caused by the earthquake.

According to the table, on the one hand, it seems that there was much damage, particularly for buildings such as houses, schools, health centers, public facilities and market facilities. In Bantul, most houses built with bricks were not reinforced with concrete and were not strong enough to uphold houses when the earthquake occurred. According to a leader of a village in Bantul, 52% of the houses were completely destroyed, 23% were half destroyed, 21% were partly destroyed, and only 4% were not destroyed at all, while 86 people lost their lives (Shiozaki, 2007, 113). This is a typical example of how many people died in the earthquake because of fragile houses. Rural household income is low for the region, and generally houses were constructed by amateur builders with the cooperation of the RT¹ in this region.

¹ RT stands for Rukun Tetangga, which is neighborhood association composed with 30 - 50 households.

On the other hand, Table 1 shows that there are only minor damages in relation to communication facilities, electricity and water supply. For example, in Yogyakarta, water supply was cut off only for two days.

Therefore, we can conclude that a feature of this disaster is that, although this earthquake was normal size, serious damage occurred because of weak housing construction. The significant lesson learned, therefore, is that damage on such a scale would not have occurred if the housing had been built with earthquake-proof designs.

Table 1: Summary of estimated damages caused by the earthquake

	Central Java Province	Yogyakarta Province (including Bantul)	Bantul District
Human	1,100 death toll, 18,500 injured	4,600 death toll, 19,400 injured	4,100 death toll, 12,000 injured
Housing	68,500 houses destroyed, 103,800 damaged	88,200 houses destroyed, 98,200 damaged	72,000 houses destroyed, 137,000 damaged
Education	725 school buildings destroyed	2,200 school buildings destroyed (1,900 primary schools)	950 school building destroyed
Health	1 hospitals, 16 health centers, 56 health posts damaged or destroyed	17 hospitals, 117 health centers, 324 health posts damaged or destroyed	26 health centers and 67 health posts damaged or destroyed
Transportation	relatively minor damage	relatively minor damage	relatively minor damage
Communication	minor disruption	minor disruption	minor disruption
Electricity	few days of disruption	few days of disruption	few days of disruption
Water supply	minor disruption and few leaks	minor disruption and few leaks	minor disruption and few leaks
Public and social facilities	12 social facilities affected, 827 religious facilities damaged	67 social facilities affected, 10-20% of total religious buildings (2,200 facilities)	affected, Prambanan temple heavily damaged
Business	7,860 Small and Medium-sized Enterprises (SMEs) affected	21,760 SMEs affected, 6 major hotels damaged	75% of total enterprises affected (including 14,620 SMEs)
Market facilities	10 traditional markets damaged	85 traditional markets damaged	17 traditional market damaged

Source: Resosudarmo (2008)

1-1-4 Emergency relief and recovery planning, and rehabilitation process²

After the earthquake happened, people stayed in simple tents near roads. From a few days to 2 weeks, people made tents within their residential sites. Around two months after the earthquake, temporary houses were built within their residential sites. They were often made of wood or bamboo (Shigemura, 2006). Gadjah Mada University (UGM) offered a model for temporary shelters built with bamboo, which is a traditional material for architecture in Indonesia (Shiozaki, 2007, 114). Because of the high expense of building materials, some local people tended to build just barracks or tents (*Ibid*, 114).

The National Coordinating Board for the Management of Disaster (BAKORNAS), along with provincial and local authorities, played a leading role in coordinating emergency response mechanisms on the ground (Office for the Coordination of Humanitarian Affairs, 2006). Staffs of the UN and BAKORNAS were deployed to Yogyakarta on May 14, 2006, to monitor and support the preparation related to the possible coming eruptions of Mt. Merapi. Following the earthquake which happened on May 27, 2006, the team worked with the local government to establish a mechanism for sharing information and coordination among various actors. This may be one of the reasons why the response by the public organization for the earthquake was so quick (Office for the Coordination of Humanitarian Affairs, 2006).

1-1-5 Processes of rehabilitation and reconstruction

Although local people should be central in reconstructing their lives, there were many actors involved with the reconstruction process in order to support local people, including the central government, provincial governments, local governments, local communities, NGOs, universities and international organizations.

1-1-5-1 Governmental activities

Local governments in the affected regions had planning and implementation capacities, while the national government played a coordinating and implementation role in this case (ADB, 2006, 1). After the 2004 Indian Ocean Tsunami, Indonesia enacted a new law on disaster

² The initial coordination of emergency relief, rescue efforts and resource supplies included following activities: (a) Indonesian military transported planes for implementing plan and evacuation, cooperating with teams of medical staff; (b) Hospitals were set up by Ministry of Health; (c) Essential supplies of water, food, tents, and beds were coordinated by Ministry of Social Affairs; (d) Transport and implementation assistance was provided by Ministry of Transport (Office for the Coordination of Humanitarian Affairs, 2006).

management (Law 24/2007) that outlined the principles, division of labor, organization and implementation of the National Disaster Management System, including the role of international organizations. The new disaster management law brought a major shift in the establishment of a more dedicated agency to deal with disaster, Badan Nasional Penanggulangan Bencana (BNPB³). BNPB is empowered with a strong mandate to coordinate line ministries on the entire cycle of disaster management from pre-, to post-disaster stages. The Law also clearly mandated the creation of disaster management agencies at the provincial (mandatory) and district (depending on the needs and capacities) level. Recent initiatives are now directed to establish a disaster management agency counterpart at sub-district and community level in an attempt to educate and encourage the local people to be involved in the whole process of disaster management.

The governmental financial support for reconstruction of houses is called POKMAS. POKMAS is a coinage made of Kelompok, which means ‘group’ and Masyarakat, which means ‘community’ (Hayashi, 2009). The financial aid would be given to the POKMAS group, consisting of 15-18 people, and POKMAS distributes the money to individual villagers. Only permanent housing, not temporary shelter, is eligible for POKMAS. Local communities determine the way of organizing POKMAS and distributing the fund. POKMAS had been utilized in the Bantul Region after the 2006 earthquake (*ibid*).

1-1-5-2 Local people’s activities

In the reconstruction process of houses, neighbors cooperated with each other to build homes, especially in the rural areas, where the idea of mutual help is common. Mutual help within communities is of particular importance because it is expected that there is no migration of people or the destruction of communities during the steps of evacuation, temporary living, and building permanent houses, therefore original communities are preserved (Shiozaki, 2007, 115). Since local people do not have experience to build concrete houses, university staffs teach basic skills of house construction. This process is called community training (*Ibid*, 115).

1-1-5-3 Disaster education

Disaster education is one of the important disaster mitigation policies. Our definition of disaster education is to learn how to protect people and communities when disaster happens by:

³ BNPB is the National Disaster Management Agency.

1) understanding the mechanism of disaster; 2) investigating the actual circumstances of society and regions; and 3) leaning how to prepare for and cope with disaster through self-support, co-support, and official support (Cabinet Office, Government of Japan).

As an example of the need for disaster education, a remark made by the principal at an elementary school, when asked about disaster education, replied that he did not know the mechanism of an earthquake itself. Moreover, education such as running under the desk is not practiced at school (Disaster Prevention Information Research Center, 2006).

In Japan, schools are often designated for use in an evacuation when disaster happens. Therefore, it is important to spread the idea through disaster education, that infrastructure such as schools, which work for mitigating disaster, should be built with earthquake-proof methods (*Ibid*).

1-2 Objective/purpose of the study

When the 2006 earthquake happened in Indonesia, despite the frequency of earthquakes and the relative normal size, serious damage occurred, especially in Yogyakarta. The lack of provision for disaster awareness of local people and the lack of Earthquake Proof Housing (EPH) were two reasons why the earthquake caused widespread injury. The lack of local people's disaster awareness depends on the capacity of the government to take measures against earthquakes. Therefore, current policies of these two aspects of DRR are important to be investigated for tackling future earthquakes. In addition, post-decentralization DRR policies are also examined, since decentralization may have influenced these policies.

Thus, the two aspects of DRR policies and the situation in Yogyakarta are surveyed in this paper. In order to examine these, the research focuses on three points: disaster education, earthquake proof housing and comprehensive DRR.

1-2-1 Disaster education

As we stated above, our definition of disaster education is to learn how to protect people and communities when disaster happens by: 1) understanding the mechanism of disaster; 2) investigating the actual circumstances of society and regions; and 3) leaning how to prepare for and cope with disaster through self-support, co-support, and official support (Cabinet Office, Government of Japan). Disaster education is not only for children in schools, but also for people

in households, communities and workplaces. Also the way disaster education is provided includes school curriculum, social education at the community level and mass media.

When an earthquake happens, people's actions should be a result of what they have learned. For example, if people have experienced a drill for protecting themselves or evacuating, they may be able to reduce risk of serious injury. Therefore, the promotion of education of DRR should be provided by the government as in the case of schools, where the government is involved in the process of establishing school curriculum. Education of DRR also needs cooperation with civil society because local people know the most about their own community. Therefore, this paper will mainly discuss how much local people understand government policy and programs related to disaster education.

1-2-2 Earthquake proof housing

There is little information about what types of material (brick, brick reinforced by concrete, bamboo, concrete, etc.) were used for housing through POKMAS. Since the reconstruction was managed by Gotong-royong, which means the culture of reciprocity in Java. This means that villagers, who built their own houses, might reconstruct their houses in their familiar ways, for example, with brick building, even though there were the initiatives promoted by Gadjah Mada University which promoted the reconstruction of houses with bamboo or concrete. It can be also anticipated that the local government just prepared for POKMAS and did not support local people to build EPH. Therefore, housing without earthquake proof structures may be in common in Yogyakarta region. This means that local people in Bantul may be still vulnerable to the possible devastation of future earthquakes. A survey of the current situation of EPH in Bantul, especially if it reveals that there is insufficient disaster prevention, will therefore contribute to the disaster prevention of future earthquakes in the region.

1-2-3 Comprehensive DRR

Matsui (2009, 32-35) mentions that although Indonesia is said to have been widely decentralized since the end of the Suharto regime, such decentralization made new centralized authorities on a smaller scale in some regions. Such authorities may have conflicts with other authorities. It might be true even in terms of DRR. Decentralization may cause the creation of many institutions, which has its own DRR policy or strategy, and these DRR policies may not always cooperate with each other. This research attempts to survey the types of DRR policies and programs for each institution and to examine how these institutions cooperate with each

other.

1-3 Research questions

1-3-1 Disaster education

To specify current governmental policies and activities of disaster education, as well as the local people's perception about them, the research asked the following questions: "What kind of policies for disaster education does the government have?"; "How does the government provide information of these to local people?"; and "How much do local people understand and utilize the information?"

1-3-2 Earthquake proof housing (EPH)

In order to know current disaster prevention measures by the communities in terms of housing, the research asked the following questions: "What kind of housing is built in selected villages and what kind of know-how do the residents use to build their houses?"; "Is there any support which has been provided after the earthquake in 2006 for local people to build EPH at least bamboo house?"; and "What is the local people's awareness about EPH and about the governmental support for EPH?"

1-3-3 Comprehensive DRR

To identify and evaluate the existing institutions and policies regarding DRR and to identify constraints that exist between government and local people in terms of DRR, the research sought to answer the following questions: "Was there any channel for coordinating the implementation of DRR programs between the government and local people?"; "What were the roles of each stakeholder in every stages of national comprehensive DRR program?"; and "What was the capacity and how was the implementation for DRR policy for each institution?"

1-4 Hypotheses

1-4-1 Disaster education

Governments could have provided more information regarding disaster education for people after the Java earthquake in 2006.

1-4-2 Earthquake proof housing (EPH)

We test three hypotheses about EPH: 1) the proportion of brick houses without concrete reinforcement is largest in the village; 2) there is little support given by the government other than POKMAS because of the lack of local demand for disaster proof housing; and 3) local people have less access to the information about the way of building concrete or bamboo houses and are not well aware of the effectiveness of bamboo or concrete houses for disaster prevention.

1-4-3 Comprehensive DRR

There are some constraints in the implementation of a comprehensive disaster risk reduction program by the government-

1-5 Methodology

1-5-1 Questionnaire survey

We conducted a questionnaire survey to local people in Wukirsari Village. The village was one of most seriously damaged villages from the earthquake in 2006. Our aims of this questionnaire survey were: 1) to know the situation of villagers' houses before and after the earthquake; 2) to learn about the people's understanding about disaster education and EPH; and 3) to understand people's perceptions about governmental DRR policies, including disaster the education policy and EPH policy. Detailed items of the question are shown in Appendix 1 and all the answers of the examinees are shown in Appendix 2.

Wukirsari Village is located 15 km south of Yogyakarta in the Imogiri Sub-district, Bantul District. It consists of 16 sub-villages and its area is 15 km². 60% of the village is hill region and 40% of the village is flat land. There are 4,596 households and 93 RT, with a total population of

15,730. The poverty line is under 800,000 Rp per capita income and according to this standard, 991 households, that is, 22% of the households, are under the poverty line.

Questionnaire surveys were conducted with 29 local people in Wukirsari Village. Among the 29 respondents, 24 people were male and 5 were female. The age of participants varied with 4 people in their 30's, 5 people in their 40's, 13 in their 50's, 5 people in their 60's and 2 people in their 70's. Occupations ranged from work as construction workers, tile makers, farmers, food processors, or self-employed. Because some of the villagers were illiterate, we directly asked these participants the questions in the questionnaire with the help of our translators. Other villagers' questionnaires were distributed and collected by the village leader.

1-5-2 Interview survey

We conducted interview surveys with governmental agencies, NGOs and the primary school principal. Our aims of the interview survey were: 1) to know each agency's role in terms of DRR; and 2) to learn the inter-actions or coherent actions of each of the stakeholders and actors in the process of implementation of the DRR policy at provincial, district, sub-district and village level. The lists of our interviewee are shown in Table 2. Before each interview, we made the lists of basic questions in order to search out required information to test our hypotheses. There were some differences among the items of questions for each interviewee, as the research progressed, causing us to eliminate some questions, while adding others. Detailed information about the basic questions is shown in Appendix 3.

Table 2: The list of interviewees and examinees

Date	Time	Location	Name of informants
Sep. 20(Mon)	10:30	Yogyakarta provincial government (Public Works)	Mr. Gatot Saptadi
	13:00	Bantul district government (National Unity and the Protection of Society)	Mr. Supriyanto
	13:00	Bantul district government (Public Works)	Mr. Sunarso
	13:00	Bantul district government (Education)	Ms. Partini
		2 presentors before Mr Gatot from Education and National Society at provincial level: Mr	
Sep. 21(Tue)	8:00	Yogyakarta provincial government (Planning Office)	Mr. Danang Syamsurizal
	10:00	Yogyakarta provincial government (Education)	Mr. Sukanti Bintoro
Sep. 22(Wed)	8:00	Wukirsari Village head office	
	10:00	Local people (Wukirsari Village)	
	14:00	Yayasan Peningkatan dan Pengembangn Sumberdaya Ummat (YP2SU)	Ms.Norma, Ms Diah
Sep. 23(Thu)	8:00	Wukirsari Village head office	Mr. Bayu Bintoro
		Bantul District government (Education)*	Ms. Partini*
Sep. 24(Fri)	8:00	Bantul District government (Public Works)	Mr. Anang, Mr. Sunarso
	14:00	DRR forum	Mr. ujang, Ms. Biasanti
Sep. 27(Mon)	8:30	Ngasinan Elementary School	Mr. Mujiya (school principle)
	13:00	Bantul district government	Mr. Supriyanto*
Sep. 28(Tue)	8:00	International Organization of Migration (IOM)	Mr. Johan Grundberg, Mr. Hernowo Poetranto JB,
	13:00	Institute of Research and Empowerment (IRE)	Mr. Sg Yuliyanto, Mr. Sunarji Zamroni,
	15:00	Java Reconstruction Fund (JRF)	Mr. Arief Budi Wahyono, Mrs. Sri Aminatun, Mrs. Cici

Note: We conducted both interview survey and questionnaire survey with local people in Wikirsari Village. Informants with * indicates that we conducted interview survey twice with them because of time adjustment.

2. Findings

Through the interview process, our research questions yielded some important information. In this section, we explain about the results of the interviews divided by type of informants. The contents are as follows:

2-1 Government

2-1-1 Yogyakarta provincial government

2-1-1-1 Public works

2-1-1-2 Planning office

2-1-1-3 Education

2-1-2 Bantul district government

2-1-2-1 Public works

2-1-2-2 National Unity and the Protection of Society

2-1-2-3 Education

2-2 Local

2-2-1 Wukirsari Village leader

2-2-2 Ngasinan Elementary School

2-3 NGOs

2-3-1 Java Reconstruction Fund (JRF)

2-3-2 International Organization of Migration (IOM)

2-3-3 Institute of Research and Empowerment (IRE)

2-3-4 Yayasan Peningkatan dan Pengembangan Sumberdaya Ummat (YP2SU)

2-3-5 DRR Forum

2-1 Government

2-1-1 Yogyakarta provincial government

2-1-1-1 Public Works: Interview with Mr. Gatot Saptadi on September 20

The basic role of this office is data collection related to public policy, which includes a tier of administrative disaster management system. The system is roughly in charged by three

organizations: national BNPB, and Badan Penanggulangan Bencana Daerah (BPBD⁴) in provincial and district level. Disasters are categorized into two types based on size of damage into national disaster and district disaster. For national disasters, International NGOs participate and for district disasters, local NGOs play important roles.

For the inter-actor communication channel, the government of lower level has to submit daily reports to the government of upper level to prevent conflicts between the national and local government.

2-1-1-2 Planning office: Interview with Mr.Danang Syamsurizal on September 21

The basic role of this office is coordinate with the four provincial agencies of Public Works, Department of Education, Economy and Governance about DRR and it is also in charge of rehabilitation and reconstruction planning. After the earthquake happened, the planning department allocated part of the national annual budget for the province to rehabilitation and reconstruction. They have no regulation except POKMAS (annual budget for earthquake damage) for building materials, and no guidelines from government about housing standards. The government does offer aid for houses suffering at least average damage. The requirement for government support is that houses should be designed to be earthquake proof, i.e., designed to withstand shaking. The government also sends facilitators who come from UGM in order to train how to make disaster proof housing. In addition, they play a social function by helping the people to organize communities, especially POKMAS, to help the people to manage POKMAS and to teach them how to make houses.

POKMAS is a community-based organization that manages the community group. One POKMAS consists of 10-15 families and this POKMAS will create one account into which the national government deposits funds. Within the POKMAS it is decided in which order the families will receive the funds. Each household will get Rp.15000000, though they do not get it at one time.

For the action plan, they have keep channels of communication with other sectors such as the national planning division, international NGOs, the UN agencies, academic societies and local NGOs. As intermediate, they cooperate with the national government for the evaluation of damage in order to decide actions needed. In addition, they coordinate with the department of education for the promotion of disaster risk awareness. National declarations were made to

⁴ BPBD stands for Badan Penanggulangan Bencana Daerah in Indonesian .

integrate DRR with the school curriculum.

2-1-1-3 Education: Interview with Mr. Sukanti Bintoro on September 21

The basic role of this office is to create programs about DRR. There are four types of planning: drills/training (so citizens can understand the geography or to simulate disaster mitigation), hazard mapping, materials (guidebook) and multi-media education.

They have channels of communication built into the curriculum and promote training programs and lessons. They also cooperate with Kesatuan Bangsa dan Perlindungan Masyarakat (KESBANGLINMAS⁵), Public Works, Balai Latihan Pendidikan Teknik (BLPT⁶), the health office and the Office of Social Affairs (Foundation of new building).

2-1-2 Bantul district government

2-1-2-1 Public Works: Interview with Mr. Sunarso, Mr. Anang on September 20 and 24

The basic role of this office is to be responsible for technical disaster reduction action, especially helping to build houses, as well as planning and building schools. They consult with the school authorities on the status of buildings to decide whether they can be repaired or must be totally destroyed and rebuilt. They set the standard of housing, and within that standard, concrete is the most desirable. Cement, rock, and brick with roofs made of tile and steel are also recommended. Although construction using concrete is recommended, this type of construction was also affected by the 2006 earthquake because the houses were built on the earthquake line.

Joglo⁷ houses are also not recommended because of their expense even though, they too, are better than other types of house construction. Wukirsari Villagers prefer Joglo because they can have access to wider areas of land and it is easy to use the locally grown Jati tree, which is used for Joglo houses. However, for the urban areas these houses are more difficult to build when considering the price differences. Jati tree is Rp. 15 million per 1 m³ compared to concrete at Rp. 3 million and Kalimantan tree at Rp. 9 million. To be sure, Wukirsari Villagers

⁵ KESBANGLINMAS stands for Kesatuan Bangsa dan Perlindungan Masyarakat in Indonesian. (National Unity and the Protection of the Society)

⁶ BLPT stands for Balai Latihan Pendidikan Teknik in Indonesian.

⁷ Joglo is Javanese traditional houses which were made by wood and now Joglo rooms were used for multi-purposes such as guest room.

prefer Joglo style houses and they are considered a symbol of prestige like that of having two or more wives or having a bird. However, a new trend in housing, those made of concrete, became more prestigious in the 1970s and many homes built in the 1980s were built of concrete. The ones built earlier, before 1980s, were totally destroyed in the earthquake because materials were inferior, however houses built with concrete after 1980s, were less damaged, indicating that people were gradually becoming educated in the importance of building materials, resulting in stronger concrete homes. In addition, Public Works coordinated with district management consultants, who had come from private contractor companies. Basically such funds came from the EU and passed to the Indonesian national budget. In 2006, Public Works at district level signed a contract for accepting funds from JRF. Since it was a national level agreement with JRF, Public Works did not have a meeting with JRF about the use and allocation for the funds. POKMAS was initially included in the annual budget, and JRF was accepted later, therefore it generated a complicated budget system when it comes to the procedures to get financial aid regarding house reconstruction.

Local people didn't demand from the government a policy of earthquake proof housing, but people can give their input by using RT and Rukun Warga (RW⁸) and the information of damaged house will be reported through RT/RW. The government disseminates information about earthquake proof housing through both the media (e.g. daily newspaper) and official letter to village leader. The village leader will then meet with local people in order to socialize POKMAS. People in Bantul did not accept bamboo as a material for EPH and considered it only for use as temporary shelter, so Public Works other materials for EPH, such as concrete, metal, stone and slate. In the meantime, before 2010, Public Works was responsible for issuing building licenses but after 2010, the responsibility was passed to a permission office, which has the dual roles of sales permission and research permission. The reasons for transferring the responsibility were: convenience and work efficiency which enable people to get various kinds of permission at one place. (This structure is called "one roof, one service") The permission office which, is supported by Public Works, has the role of issuing permits for sale and research but also issues permits for design and materials. There is a district regulation that allows for transfer of responsibility. It takes 14 days maximum to issue a permit after documentation is submitted.

Public Works and Japan International Cooperation Agency (JICA) tackling with a

⁸ RW stands for Rukun Warga in Indonesian, which is composed by a group of 8~15 RT.

technical training project, making technical service center in district level, in order to inform local people and carpenter how to build house, and how to apply F1 form⁹. They serve as Commitment-maker and communicate with community about distribute funds. They have two communication channels which are; village leader and consultant. About relation to the NGOs, they receive fund from NGOs, therefore they need to have meeting; but do not have periodical meeting. In the meeting, they report ongoing situation of POKMAS and fund giving to society.

2-1-2-2 National Unity and the Protection of Society (KESBANGLINMAS):

Interview with Mr. Supriyanto on September 20 and 27

The National Unity and the Protection of Society is responsible for coordinating activities of 3 steps; before, emergency and after disaster. This office gives disaster training to those who live in Bantul district. The training manages to disasters such as flood, fire, earthquake, tsunami and other kinds of disasters. It is also responsible for victims and evacuations in emergency situations. They promote social activities for disaster risk management. These are either physical, as in how to build disaster proof housings or non-physical, which includes disaster preparation activities for children to the elderly.

In order to inform people, this office holds meetings with Public Works, the finance department and planning development in order to coordinate the policies of each department. They also invite sub-district leaders to disseminate information about government policies. From there, the information trickles down; sub-district leaders inform village leaders, village leaders inform sub-village leaders and sub-village leaders inform RT leaders (every household). In addition, this office engages the mass media to disseminate information about policies to the public. In order to protect people from disaster, they built early warning systems about tsunami in three sub-districts: Sroundakan, Sanden and Kretek. They give warning five minutes before the earthquakes via three loudspeakers. Designated professionals in the government are in charge of monitoring.

New concepts and information are channeled through various means. The Department of Civil Engineering at the Indonesian Islamic University in Suleman and Gadjah Mada University give reports to this office about materials and methods for housing construction. This office meets once a week internally and also has meetings with other actors such as Public Works, universities and NGOs, including JRF, JICA. Outside actors give recommendations for

⁹ F1 Form is an official document which surveys the situation of suffered households and damaged houses after earthquake.

construction and NGOs can contribute funds. There is no policy to strengthen inter-actor cooperation.

Mr. Supriyanto also told us about POKMAS, though the POKMAS system was not directly related to the office's regular work. Requests or demands from people seem to be centered on housing policies only, in particular POKMAS. Some local people felt the distribution of POKMAS was unfair and inquired about why they were not chosen to be members in the POKMAS program. This office conducts actual evaluations for the distribution of the POKMAS benefits.

2-1-2-3 Education: Interview with Ms. Partini on September 20 and 23

The basic role of this office is the management of the elementary school disaster awareness program. Activities include making guidebook for disaster awareness for the teachers, creation of disaster prepared schools, implementing simulation programs and trauma recovery. (Ms. Partini gave us the information about the role of this office especially related to elementary school management.)

In addition, because of decentralization, the office has the power to create and act on its own policy, but they still have to let the province know about their activities. Thus, the provincial educational office is still powerful and serves as the coordinator of these districts. It is also responsible of reporting to the provincial level, and also when it comes to DRR program, it is coordinates with the provincial educational office in cooperation with some NGOs. However, naturally as a district with autonomy, they can directly negotiate with NGOs, by-passing the provincial government.

In the area of education for the trauma healing, this office cooperates with Yogyakarta State University, UGM, Komite Yogyakarta untuk Pemulihan Aceh (KYPA¹⁰), YAKKUM Emergency Unit (YEU¹¹), United Nations Children's Emergency Fund (UNICEF), Arbeiter-Samariter-Bund (ASB¹²), KESBANGLINMAS, and so on.

¹⁰ KYPA (Committee for the Recovery of Ache) is a civic group of Acehnese residents in Yogyakarta.

¹¹ YAKKUM stands for Yayasan Kristen untuk Kesehatan Umum in Indonesian.

¹² ASB (Worker's Samaritan Federation) is a German NGO.

2-2 Local

2-2-1 Wukirsari Village leader: Interview with Mr. Bayu Bintoro on September 22 and 23

The role of this village leader is to make a vulnerability area map support NGOs and to inform village people through local meetings of simulation and disaster preparedness activities for children to the elderly. The map is divided into three areas, red, yellow, and green in relation to their potential for disaster. Houses located in red areas are at highest risk and it is recommended that they be relocated as soon as possible. Yellow areas indicate areas where the possibility of disasters like flood and hurricane exist, and green areas are the safest. This color-coding idea came out of a local initiative. Before making these classifications, people had already been using a disaster map made by a local NGO and this new map was made with the aid of JRF. River areas are severely affected because of the rainy season. In river areas, which were close to the epicenter of the earthquake, people were also affected by flooding. Three days after the earthquakes, there were continuous rains which caused additional disasters. Because of this, people also realized their vulnerability to floods.

This village has its own regulations about earthquake, which was created by the former president Skarno, who put into effect the principle laws of Indonesia (after independence). The current law is No. 24, created in 2007 and concerns national coordination for DRR. Procedures for rebuilding houses include steps where people first need to fill in a special sheet requested by the government, which is called FA form. After collecting data at the district level, officers report to the Public Works. Public Works at the district level and UGM students observed and reported on the number houses damaged and to the degree they were houses. For this village, the earthquake of 2006 resulted in 1,145 houses that were totally damaged, 1,600 houses were severely damaged and 1,419 houses that were partially damaged. There were 1,769 households who received funds or support from various sources, including 22 houses from IOM, 247 houses from JRF and 1500 houses from POKMAS.

When comparing the causes of damages to houses between the earthquakes that occurred in the 1940s and the one in 2006, the main difference was the type of houses. While houses in 1940s were mainly built of bamboo and wood, those of 2006 were mainly made of Joglo. After the earthquake of 2006, the Joglo houses were still standing while most of others, including concrete houses, collapsed. Joglo houses are made of the Jati tree, which was originally only built by wealthy people. Ordinary people also use Joglo style houses nowadays, with the

difference between the wealthy and the others being the number of polls used. The Joglo house we visited during this research had 26 polls, which had a feature of the Joglo style houses. Wealthy people tend to have more ornaments. Joglo houses have two good points when considering characteristics to withstand earthquakes. The wood from Jati tree is very flexible when shaken. In addition, the architecture of Joglo houses also allows them to move flexibly during earthquakes. There are five to seven stages in the design of the Joglo houses. And there is a similar type of house, which is called Limasan.

Government cooperated with JRF, mapping the vulnerable areas in the village level, and then the data was reported to the district level, provincial level and the national level.

2-2-2 Ngasinan Elementary School: Interview with Mr. Mujiya, school principal, on September 27

This school has 203 students, 10 regulation teachers, 5 honorary teachers, 2 administrative officers and 1 maintenance staff. In Yogyakarta, each elementary school has its own curriculum, especially for DRR. Each curriculum is adept at maintaining the school environment with local culture around the school, thus each school makes their own curriculum for DRR following the Provincial Education Department DRR curriculum and National Education Department curriculum as guides. The DRR curriculum is incorporated into almost all subjects, especially science, social lessons and language (Bahasa). There were materials from several organizations such as JICA regarding disasters were also provided just 4 months ago. In the lesson at the school, they teach about earthquakes using simulation. During the simulation teachers make the warning sounds and students hide under the table. After waiting until the shaking stops, they run outside the school in one line, protecting their head with something like their school while avoiding pushing each other to prevent unnecessary injuries. In addition, they have a specific curriculum for the healing of the trauma of earthquakes that involve outside learning, playing games and singing. Catholic World Service (CWS) invites 20 students to the science museum, Taman Pintar, to learn more about DRR while they enjoy playing in their playground.

Each school has to cooperate with the Bantul District Department of Education, school committee, parents, public figures in Wukirsari Village and NGOs concerning their own curriculums. However, for the NGO curriculums, as stated earlier, CWS invites 20 students, 10 boys and 10 girls to be trained in DRR, while ASB invites 5 teachers.

2-3 NGOs

2-3-1 Java Reconstruction Fund (JRF): Interview with Mr. Arief Budi Wahyono, Mrs. Sri Aminatun and Mrs. Cici on September 28

The basic role of JRF is distributing funds for housing damaged by disasters and making disaster maps. The Java Reconstruction Fund (JRF) is composed of members from Britain, Denmark, Canada, Finland, the Netherlands, the EU and the ADB. JRF funds are given for house building. JRF signed a grant agreement with the national level of the Public Works Office (2007-2011). They offered funds only for homes that were totally damaged house or heavily damaged. The difference between POKMAS and JRF is that POKMAS covers all the types of damaged houses while JRF covers only completely and heavily damaged houses.

JRF communicates with World Bank, Public Works (national level), IOM, National Management Consultant (NMC), and District Management Consultant (DMC) about funds to local people.

2-3-2 International Organization of Migration (IOM): Interview with Mr. Johan Grundberg, Mr. Hernowo Poetranto JB and Mr. Yohan Rahmat Santosa on September 28

The basic role of IOM is to provide emergency houses (pre-fabricated bamboo houses), DRR training for earthquake proof model houses, disaster education (through campaigns), build adjusted houses (to fit the needs of handicapped persons) and medical assistance. They provided approximately 15,000 emergency houses built from bamboo. These houses were pre-fabricated transitional houses with a maximum lifespan of 1~2years. They also provide transportation and logistics support for other NGOs and service providers and give medical assistance and DRR training for earthquake proof model houses. They have built 20 houses for demonstration and 6 community centers for an earthquake proof housing training program. As for disaster education, they have a specific program/project about DRR, which is composed of public information and campaigns during DRR and post-DRR.

IOM communicates with United Nations Development Program (UNDP), Cooperative Housing Foundation (CHF), DRR Forum, JRF, Dutch Red Cross, The Deutsche Gesellschaft fur Technische Zusammenarbeit (GTZ ¹³), Badan Perencanaan Pembangunan Daerah

¹³ GTZ (German Society for Technical Cooperation) is a private international enterprise owned by the German Federal Government.

(BAPPEDA¹⁴), Badan Perencanaan dan Pembangunan Nasional (BAPPENAS¹⁵), the national technical coordination team, and so on. As for JRF, it is basically a Trust Fund from the World Bank and they have a coordinate housing reconstruction with UNDP. They are an observer member NGO of the DRR Forum.

2-3-3 Institute of Research and Empowerment (IRE): Interview with Mr. Sg Youliyanto, Mr. Sunarji Zamroni and Mr. Bambang Hidayana on September 28

IRE started in 2003 and its role is working for democracy, good governance, education, community empowerment, and so on. After the earthquake in 2006, IRE participated in the reconstruction process and provided livelihood support and temporary shelters with IOM in Wukirsari Village. IRE also had a recovery program to support the batik industry, which was destroyed by the earthquake, as well as a livelihood recovery program for women who worked in the batik factories.

IRE received funds to start a program of promoting disaster education with training in the village. They trained the village leader, carpenters, midwives, civil servants, first aid workers, facilitators and emergency shelter builders.

IRE has communicates with and is supported by 70 NGOs. IRE practices sweeping organization and education techniques to promote disaster education for the bottom majority. They promote partnerships with government at the local provincial and district levels, NGOs, and community.

2-3-4 Yayasan Peningkatan dan Pengembangn Sumberdaya Ummat (YP2SU): Interview with Ms. Norma, Ms. Diah on September 22

YP2SU was started in 2004 and currently has a staff of 35. They engage in micro finance activities in three regions, including the Bantul Region. After the earthquake in 2006, they assisted with distribution of food, medicine, and temporary shelters. They also gave training on how to build houses with coordination among NGOs. Training is held by staff that have the capacity, but mostly from the Indonesian Red Cross and Jakarta State University.

They have a program called the “Disaster Aware School,” which has been funded with 900 million Rp. from UNDP. The program started in June 2010 and targets three pilot schools (one each, elementary, junior high, and high school) in Bantul. The three schools were chosen

¹⁴ BAPPEDA is Regional Development Planning Body at provincial level.

¹⁵ BAPPENAS is Indonesian National Development Planning Body.

based on their high vulnerability for disaster and by recommendation of the Department of Education at the district level, as well as the disaster department. Each school trains students and teachers and has different risk reduction program depending on its geographical location as related to different potential disasters, i.e., earthquake, tsunami, flooding, land erosion, etc. Each school also has a part of the curriculum devoted to disaster education and this curriculum is formulated with coordination of the National Disaster Department, Red Cross, ASB from Germany, UNDP, international NGOs, and local NGOs.

2-3-5 DRR Forum: Interview to Mr. Ujang, and Ms. Biasanti on September 24

The DRR Forum started in 2006, after the earthquake happened. The Ministry of Social Affairs at the level of the provincial government supports this forum and it targets young people with the anticipation that it is easier to shape the thinking of younger people towards disaster readiness in regards to earthquakes. The forum aims to inform about earthquakes through the community radio and local newspaper. The basic role of this forum is socialization ranging from children to elders in the community, as well as, data collection. In regards to data collection, its role was to survey the death toll of the earthquake so as to construct a monument that the named the victims. This was to make people aware of the misery of the earthquake. After that, they asked older people in the community about their experiences of former earthquakes, a subject that had been previously rarely talked about. After the earthquake in 2006, forum members started to ask the elderly about their experiences and they started to talk about it. Thus, this forum has three main roles, which include keeping alive the memories of the earthquakes that occurred around the 1940s, collecting historical data of occurrences in the village and mapping of vulnerable areas. They facilitate the three villages of Girirejo, Srimulyo and Trimulyo. From July 2010, they've had more than 15 meetings. Catholic organizations were invited to share information. The government also invited four villages to share information about disasters. This meeting is held for 3 days twice a month. There is also hope to build the DRR Forum at the district level, so that like the provincial level, there will be support by the legal foundation. In terms of legal aspects, up until the present, DRR has been supported by only village regulations. Some villagers trust this forum because it is based in the community, however if there are upper level legal supports, it is assumed that there will be an increase in trust among the local people.

In 2008, trauma healing education was held at five elementary schools. DRR, especially trauma healing education, was integrated into the school curriculum. It uses teaching tools such

as books that teach about disaster education in interesting and enjoyable ways. The trauma healing program is designed through the corroboration of the Gadjah Mada University, Department of Psychology and other universities. They believe that there are concrete ways to heal children who have experienced trauma, through fun activities and raising children's spirits.

DRR Forum has communication channel with social development department, UK Department for International Development (DFID), JRF, Food and Agriculture Organization of the United Nations (FAO), local NGO institution of empowerment. They cooperate with the department of social affairs, JRF, and CWS about the Mapping.

3. Arguments

3-1 Hypothesis about Disaster Education: Governments could have provided more information about disaster education for people after the Java earthquake in 2006

3-1-1 Evidence that supports the hypothesis

The results for question number 1 in the questionnaire on the part of Disaster Education: Are you aware of any policy from the government at any level (national, provincial, district) about disaster risk reduction education?

Out of 29 sheets, the answers are:

-Yes: 10

-No: 15

-No answer: 4

In this community, the number of people who were aware of government policies was less; therefore this could be evidence to support this hypothesis. All answers of interviews with local people in Wukirsari Village are shown in Appendix 2.

3-1-2 Evidence that does not support the hypothesis

3-1-2-1 The results of the interview with Ms. Partini (Officer of Elementary Education in Bantul District), Mr. Mujiya (Principal of Ngasinan Elementary School) about school curriculum and simulation programs

According to Mr. Mujiya, each school makes its own curriculum for DRR following the DRR curriculum of educational office at provincial level and the curriculum of national department of education as guides, as well as in coordination with the educational office at district level.¹⁶ In addition, this school has created DRR curriculum for each subject, which corresponds with Ms. Partini's statement that the educational office integrates DRR program for everyday lessons.¹⁷

Therefore, after the earthquake in 2006, it can be said that each level of government was able to provide enough information about DRR curriculum to students within the school

¹⁶ From the interview with Mr. Mujiya on September 27

¹⁷ From the interview with Ms. Partini on September 23

system.

Ms. Partini answered that the educational office implements simulation programs in schools, and Mr. Mujiya explained about the contents of simulation in the school we visited. We also asked students in the school to simulate the condition which an earthquake happened, and the result of simulation showed that the students have adequate knowledge about DRR. For example, they could perform the following activities in the simulation:

- Protect their head
- Do not panic
- Hide under the table
- Go out of classroom after the earthquake stops
- Give first aid

From this result, after the earthquake in 2006, it can be inferred that the government has provided sufficient information about disaster education for school children.

3-1-2-2 Interview to DRR Forum

DRR Forum, which is supported by the district government, plays an important role in terms of providing information related to DRR, from the government to the local people not only in Wukirsari Village, but also in other villages. According to interviews with the staffs of DRR Forum in Wukirsari Village, they sometimes communicate with local people through community radio and the local newspaper to inform local people about the governmental DRR policy, since these media are an easy way to access and get information from the government. DRR Forum in Wukirsari Village facilitated the formation of new DRR forums in three other villages and they have had more than fifteen meetings since July 2010.¹⁸ Therefore, it can be said that the government has built connections and has shared information about disaster education with the local people through the DRR Forum.

3-1-2-3 Disaster education for special school and inclusive school

In the interview with Mr. Sukanti Bintoro, an officer of Education, Youth, and Sports in Yogyakarta Province, he mentioned that they introduced a training program for disabled students in inclusive schools. According to the explanation, special schools are for only disabled students, while inclusive schools accept everyone. In addition, they use guidebooks

¹⁸ From the interview with DRR Forum on September 24

published by ASB (German NGO) as a guideline for disaster education for disabled students. Guidebooks include how to build infrastructure for disabled students and are also used for teachers' DRR learning.¹⁹ This suggests that the government offers comprehensive disaster education program through the promotion of programs for all students.

3-1-2-4 Trauma recovery program

The government has provided information to the schools regarding disaster education in addition to DRR curriculum and simulation.

According to the interview with Ms. Partini, an officer of Elementary Education in Bantul District, the program for trauma recovery is still going on because of the time it takes to heal from the trauma of the earthquake. The trauma recovery program, provided by the department of education at the national and provincial levels is composed of singing, dancing, and theater arts. The program was coordinated with cooperation with Yogyakarta State University, Gadjah Mada University, UNICEF, ASB, KESBANGLINMAS, and so on.²⁰

Even though this evidence does not directly disprove the hypothesis, it implies that the governments' support of disaster education covers a wide range of the areas of education and disseminates information about DRR.

3-1-3 Analysis of the evidences

3-1-3-1 Why is the number of people who are aware of disaster risk reduction education by governments small in the questionnaire survey?

Four examinees in this village that answered "Yes" for question 1 of the disaster education part, knew about the government policy for socialization by the government and NGOs. Three of them suggested that the government should create socialization policies repeatedly and more frequently. One of the interviewees suggested that the government should make disaster socialization routine, for example once in three months.²¹ These results imply that activities by the government in the village were not held regularly. From this point of view, if the government creates regular socialization activities, which are related to disaster education, awareness about the government's policy would be raised, and people could get

¹⁹ From the interview with Education of Department in Yogyakarta Province on September 20

²⁰ From the interview with Ms. Partini on September 23

²¹ From the questionnaire survey to local people in Wukirsari Village on September 22

information and knowledge about disaster education directly from the government.

The answers of the questionnaire also suggest that activities carried out by NGOs and communities were more familiar to people during the first few months after the earthquake in 2006. While 28 out of 29 answered that they did not know about government policy, they have their own action plan within the community and their family in order to avoid too much damage when disaster happens. They answered that they learned about risk reduction and action plans from the community and NGOs.²² Interviewees tended to answer question number 1, “Are you aware of any policy from the government at any level (national, provincial, district) about disaster risk reduction education?” with a focus on the immediate post-earthquake phase rather than the current effort of disaster education. Most of them mentioned that during the few months after the earthquake, the government did not support people very much, while NGOs played an important role. For example, IOM provided training about rebuilding houses for people and lectures about disaster mitigation for village leaders. Also one NGO provided DRR training for people in Wukirsari Village.²³ From these points, it seems like NGOs had more frequent and various support than the government in the immediate post-earthquake phase, therefore, people recognize NGOs’ activities as more helpful than the government when it comes to disaster risk reduction education.

In addition, the earthquake in 2006 brought damage to a wide area, which was different from more local disasters such as landslides. In the case of large-scale disaster such as the earthquake in 2006, it can be assumed that in the immediate post-earthquake phase, there must have been difficulties and limitations for the government to provide sufficient information on its own in terms of the limited number of civil servants. Even though, the government’s lack of preparation for large-scale disasters could be lessened for future disasters if NGOs, which are more rooted in local regions, can play important roles toward disaster education as opposed to the government with its limited capacity.

3-1-3-2 Contradiction between the results of the questionnaire and information from DRR

We conducted a questionnaire survey in Wukirsari Village, where DRR Forum is working. The results of the questionnaire prove the hypothesis in terms of the people’s poor understanding of the governmental disaster education policy; whereas the staffs in DRR Forum

²² From the questionnaire survey to local people in Wukirsari Village on September 22

²³ From the questionnaire survey to local people in Wufffkirsari Village on September 22

told us that the government communicates to the local people through DRR Forum in terms of disaster education.²⁴ This contradiction may be attributed by the fact that DRR Forum could not yet cover all RT/RW in Wukirsari Village.

Another reason may be that government's activities were in a sense, invisible behind the activities of DRR Forum even though the government provided information through DRR Forum; therefore governmental information on disaster education is transmitted indirectly, which results in a small number of people who are aware of the government's policy.

3-1-4 Conclusion

In the immediate phase post-earthquake, local people tended to recognize that NGOs, rather than the government gave more support for local people of Wukirsari Village, where we gave the questionnaire survey. In Wukirsari Village, local people might have insufficient information about governmental disaster education policy because of the limited number of civil servants to visit there and because of the dominant influence of NGO's disaster education activities. This is one of the reasons why only a small number of the local people are aware of information that the government has provided. Another possible reason is that, from local people's perspective, the government's activities to spread information about disaster education were not held regularly; therefore people did not have a chance to learn this policy and get information about disaster education.

On the other hand, in the case of Ngasinan Elementary School, the information about DRR curriculum from the government at national, provincial, and district levels has been successfully provided to schools. Actually, pupils in the schools were well aware of the contents of disaster education.

Also, in terms of community, the government cooperates with local CBOs and DRR Forum, so that to provide information to the community through local media, even though these activities are not well recognized by the local people.

Overall, the government has gradually provided more information about disaster education to people through local CBOs and school curriculum after the earthquake in 2006.

²⁴ From the interview with DRR Forum on September 24

3-2 First hypothesis about EPH: The proportion of brick houses without concrete reinforcement is highest in the village

3-2-1 Evidence that supports the hypothesis

According to the Table 3 below, bricks were used as housing material for 25 houses and concrete was not used before the earthquake in 2006.

Table 3: Materials used for housing

	Brick	Steel	Wood	Sand	Clay	Bamboo	Cement	Stone	Concrete	Coral	Limestone	Asbestos
Before the earthquake	25	2	7	9	7	12	13	4	0	0	4	0
After the earthquake	14	14	5	15	0	0	18	6	1	2	1	1
Considered desirable by local people	22	21	2	18	2	0	14	4	5	0	0	0

Source: From the questionnaire survey to local people in Wukirsari Village on September 22

3-2-2 Evidences which do not support the hypothesis

According to the table above, there are many kinds of materials, apart from brick. Also, after the earthquake in 2006, only 14 houses utilized brick and 1 house utilized concrete.

3-2-3 Analysis of the evidences

We first assumed that there would be mainly brick houses. Before the earthquake in 2006, the proportion of brick without concrete is the highest. There are several reasons that local people used bricks for their houses. According to Table 4 below, the main reason should be economic constraints of local people. Thirteen examinees of the questionnaire survey answered that they used brick without concrete for their housing since they did not have enough money at that time.²⁵ Also, five of local people chose to use it because it was easy to find, and three of them responded that it looked good.²⁶

On the contrary, the proportion of bricks for housings decreased to 14 after the earthquake. The reason is because the government and NGOs gave various supports to local people in building their houses. The proportion of cement increased after the earthquake. It has been partly achieved by the financial support of both the government and NGOs. Also, there is an example of government support in which government staff provided the design plans of the housing to the local people and taught how to use cement.²⁷ The proportion of concrete and iron has also slightly increased. This is because of the introduction of a new concept of the building provided by the government. Before the introduction of this new concept, the desirable housing materials were concrete, cement and brick.²⁸ After the introduction of the new concept, the desirable housing materials became iron with concrete.²⁹

²⁵ From the questionnaire survey given to local people in Wukirsari Village on September 22

²⁶ From the questionnaire survey given to local people in Wukirsari Village on September 22

²⁷ From the questionnaire survey given to local people in Wukirsari Village on September 22

²⁸ From the interview with the National Unity and the Protection of Society on September 27

²⁹ From the interview with the National Unity and the Protection of Society on September 27

Table 4: The reasons that many local people used brick without concrete
(23 of local people used brick without concrete).

Economic constraint	11
Accessibility	6
Good Looks	1
Durability	1
Good quality	3
Bad looks	1

Source: From the questionnaire survey to local people in Wukirsari Village on September 22

3-2-4 Conclusion

In conclusion, the hypothesis that the proportion of brick without concrete reinforcement in the village is the highest proportion is proved for the case before the earthquake in 2006, as indicated by the interviews of the local people in Wukirsari Village. However, even before the earthquake in 2006, many materials, except brick were utilized for houses. Also, differing from the hypothesis, after the earthquake in 2006, the proportion of brick decreased and the proportion of concrete slightly increased as well as cement, iron and the like. The reasons behind this change are the result of interventions by the government and NGOs, providing local people with financial and technical support. Also the change of concepts towards housing materials by the government would have influenced the outcome.

3-3 Second hypothesis about EPH: There is little support by the government, other than POKMAS, because of the lack of local demand for disaster proof housing

3-3-1 Evidence that supports the hypothesis

The government corrected the data about the amount of total damaged houses, and as a result 1145 houses were totally damaged. The government cooperated with the national army, UGM and international NGOs, which checked all of the data submitted to the Public Works of the national government level. The district government chose 1769 households as recipients of

subsidies, which came from the POKMAS system, but local people who were not chosen complained and clarification was the responsibility of the Public Works at the district level. Finally, an additional 388 households were selected by the district government.³⁰ In such way, we observed that POKMAS was working well as a part of EPH policy. However, local people who were not initially chosen by the government as POKMAS recipients complained to the government, and finally the district government selected an additional 388 POKMAS recipients. From this point, we can say the demand of the local people was conveyed to at least the district level government through RT, partly disproving the argument of this hypothesis.

As a reply to the question: “Is there any demand by the local people / request for government housing policies?” an officer of the National Unity and the Protection of Society said that there was a demand from local people only in terms of POKMAS.³¹ His answer may support the hypothesis.

3-3-2 Evidence that does not support the hypothesis

The office of the National Unity and the Protection of Society in Bantul District takes the responsibility for disaster training. Since 2010, it has held the workshop on how to make earthquake-proof housing with UGM and office of Public Works.³² Thus, the office provides the training for earthquake-proof houses.

The government offers two kinds of assistance. One is financial aid for an average level of damage to houses, however the government requires that houses are designed to be disaster-proof, for example, against shaking. Facilitators are sent from UGM in order to train in the construction of disaster-proof housing.³³ The latter support is the evidence that may disprove our hypothesis.

The government instructed on the design of the housing, for example, how to use reinforced concrete, and also offered food and clothes to local people in damaged areas. According to the local people living in Bantul District, soon after the earthquake happened, “the government offered tents.” This fact doesn’t support the hypothesis.³⁴

As a reply to the question, “How do local people get information from the government

³⁰ From the interview with the head in Wukirsari Village on September 22

³¹ From the interview with National Unity and the Protection of Society on September 27

³² From the interview with Mr. Supriyanto and his fellows, officers of National Unity and the Protection of Society, at Bantul district government office on September 20

³³ From the interview with the Planning Office on September 21

³⁴ From the questionnaire survey given to local people in Wukirsari Village on September 22

about earthquake-proof housing?" Mr. Anang in Public Works answered that there are two methods. One was through the media (daily newspaper) and the other through official letter to the village leader, who will meet with the local people in order to organize POKMAS.³⁵ We can say, according to these facts, the evidence doesn't support the hypothesis.

As a reply to following question, "Do you have technical training?" it is noted that Public Works and JICA were tackling the project by creating a technical service center at the district level. In this way they were able to inform local people and carpenters how to build houses and how to apply F1 form.

Before 2010, Public Works was responsible for giving building licenses but after 2010, the responsibility was passed to the permission office. House design and the materials used are two things that require permission. The permission office has the roles of sales, as well as, research permission. Responsibility was transferred because of a higher work efficiency and because the idea of "one roof, one service." The permission department is supported by Public Works. There is a district regulation that allows the transfer of responsibility.³⁶ Therefore, it can be said that the government is trying to increase the number of earthquake-proof house by setting the regulations.

3-3-3 Analysis of the evidences

People living in earthquake affected areas are not satisfied with POKMAS because of the corruption by the government and they also think that 5 million RP is not enough for making disaster-proof housing.³⁷ In addition to this, the local people in Wukirsari Village said that basically, there was no support from government because they did not have enough people to go to every village. After the earthquake happened, people preferred work rather than being offered money, because aid made them feels shameful. Actually, there was clothing and food aid but the most important thing for the people after the earthquake was additional aid for reconstruction of their houses.³⁸ On the other hand, from the interview with the National Unity and the Protection of Society on 27th September, the officer said that there was a demand from the local people only in terms of POKMAS.³⁹ As we mentioned above, the local people had several complaints for the government, while the government officer in the National Unity and

³⁵ From the interview with Mr. Anang in Public Works on September 24

³⁶ From the interview with Mr. Anang in Public Works on September 24

³⁷ From the interview with IRE on September 28

³⁸ From the questionnaire survey given to local people in Wukirsari Village on September 22

³⁹ From the interview with National Unity and the Protection of Society on September 27

the Protection of Society mentioned that there was a demand from local people only in terms of POKMAS. In short, there is a contradiction of perception between civil servants and the local people about the demand of public services of DRR.

The government instructed on house design, like how to use reinforced concrete, and also offered food and clothes to the local people in the damaged areas. However, the procedure to apply these goods was complicated. The government needs to simplify the application procedures, give additional support in the Technical Service Center and improve the quality of the tents used as emergency housing. The government created the Technical Service Center for informing the local people on how to write F1 forms for getting aid, but some local people couldn't understand the procedure for submitting the applications. Thus, the government and Technical Service Center needs to determine the areas that are not clear for the people.

Because of the lack of budgeted funds, the government needed to depend on international NGO funds, like JRF's funds, in addition to POKMAS. Basically, funds come from the EU and are passed to the Indonesian national budget. In 2006, Public Works at the district level just signed a contract without meeting with JRF about the way the funds would be allocated and used, since it was a national level agreement with JRF. Initially POKMAS was included in the annual budget and JRF followed, resulting in a complex system. If JRF funds had been included in the annual budget of government, the procedures to get financial aid regarding house reconstruction would have been less complicated.

In regards to the selection of POKMAS recipients, some people felt that the distribution was unfair and thus, inquired to the government why they were not chosen resulting in evaluations conducted by the National Unity and the Protection of Society (Public Works at district level). Therefore National Unity and the Protection of Society needed a clearer standard in order to decide POKMAS recipients.⁴⁰

As for the demand from local people for a government policy of earthquake-proof housing, there is in fact no direct route to petition the government, but people can submit their requests by using RT/RW. Information about damaged houses is also reported through RT/RW. Therefore, as a result of the boost in DRR policy, RT/RW takes the role of linking local people with the government.⁴¹

⁴⁰ From the interview with Mr. Anan in Public Works on September 24

⁴¹ From the interview with Mr. Anan in Public Works on September 24

3-3-4 Conclusion

Before the field survey, we regarded POKMAS as a just fund for reconstruction of houses, thus the offered a hypothesis that the government offered only financial support for local people as a part of the earthquake-proof housing policy. However, our field survey revealed that POKMAS has a function of training people to learn how to build earthquake-proof houses. In addition, the government promotes construction of earthquake-proof houses by setting permission standards for building new houses and helps local people to build earthquake-proof housing through technical service centers. Therefore, we cannot conclusively state that there is little support offered by government other than POKMAS. In terms of local people's demands about earthquake-proof houses, we understood that there was some satisfaction for the selection of households for POKMAS in Wukirsari Village. Through the questionnaire survey, we observed that local people have different demands related to earthquake-proof houses, while one government officer told us his office did not receive any requests from local people other than POKMAS in terms of earthquake-proof housing. We need to do further research on this point.

Table 5: Results of question 12-b in the questionnaire survey

Examinee	Answers which support hypothesis	Answers which do not support hypothesis	Answers which are not related to the hypothesis test
1	The most desirable materials is steel and cement.		
2		Combinations of steel & concrete for house	
3	Steel		
4		Combinations of steel & concrete	
5		Iron and concrete for cast (combinations of steel &	

		concrete)	
6	Steel		
7		Concrete frames (refers to combinations of steel & concrete)	
8			Strong enough
9			n/a
10			n/a
11	Brick, cement, steel and clay roof		
12	Cement, brick, rock, sand and steel		
13	Brick, sand, cement and steel		
14	Steel, cement, sand, brick, clay roof		
15	Cement, brick, rock, sand and steel		
16	Sand, cement, rock and steel		
17			n/a
18	Cement and steel		
19	Cement and steel		
20	Redbrick, cement, sand and steel		
21	Cement, rock, sand, brick and steel		
22		Cement, brick with concrete ring	
23	Cement, steel and sand		
24	Steel, brick, sand cement and steel		
25	Steel, wood, brick		

26			n/a
27			n/a
28			n/a
29			n/a

Source: Questionnaire survey given to local people in Wukirsari Village

3-4 Third hypothesis about EPH: Local people have less access to the information about the way of building concrete or bamboo houses and are not well informed about the effectiveness of bamboo or concrete houses for disaster-prevention

3-4-1 Evidence that supports the hypothesis

The answers for question 12-b in the questionnaire survey are shown in Table 5. A summary of the answers are shown in Table 6. According Table 6, only five people out of 21—that, is 23.8% of the examinees—mentioned concrete as an EPH material. The other 16 villagers did not mention concrete. They generally wrote down steel, cement, brick, sand and rock as desirable materials. This fact implies that local people are not well informed about the effectiveness of concrete houses for disaster-prevention.

One possibility is that they just did not know the name of concrete even though they know how to make concrete. They did pick up cement, sand, and rock, which are all the ingredients of concrete. However, at least it can be said that government did not inform the local people about the concept of concrete.

Table 6: Results of question 13 in the questionnaire survey

Answers which support hypothesis	Answers which do not support hypothesis	Answers which are not related to the hypothesis test
16 out of 21 (76.2%)	5 out of 21 (23.8%)	8 out of 29

Source: Questionnaire survey given to local people in Wukirsari Village

3-4-2 Evidence that does not support the hypothesis

3-4-2-1 In POKMAS, people learn how to build houses, which meet the requirements

of the government

The officer in the Planning Office explained that the office has three functions related to POKMAS: 1) help the people to organize communities, especially POKMAS groups; 2) help local people to manage POKMAS; and 3) teach people how to construct houses. These functions imply that local people have the opportunity to become aware of the government standards on EPH.⁴²

3-4-2-2 House trends are reflected by the social change⁴³

According to officer of Public Works, after the start of the 1970s, there was new trend in housing in which people assumed concrete houses were the most prestigious. However, concrete houses, which were built in 1970s, were totally destroyed by the earthquake in 2006 because the materials used were inferior. However, many of those built in the 1980s, were only slightly damaged by the earthquake. After the start of the 1980s, people were gradually educated and began to build stronger concrete houses, indicating that people gradually accumulated knowledge of EPH. It is possible that this change of housing trends was induced by social and cultural changes, rather than incentives for EPH, but still it can be said that local people increased their knowledge about EPH through these changes.

3-4-2-3 Two ways to inform people about DRR—daily media and official letter⁴⁴

The government has at least two ways to inform people about DRR policy and programs. The first channel is through the media, like the daily newspaper. The second is an official letter, which is delivered to the village leader. The village leader will then have a meeting with the local people in order to organize POKMAS. These channels imply that the central and local governments have the capacity to inform government standards of EPH to local people.

3-4-2-4 IRE program about EPH toward local people⁴⁵

Four months after the earthquake in 2006, IRE taught local people about EPH. IRE first taught leaders of the village, civil servants, midwives and carpenters about how to prevent housing from being destroyed and how to make a standard of housing. Therefore, it can be said

⁴² From the interview with the Planning Office in Yogyakarta provincial government on September 21

⁴³ From the interview with Public Works in Bantul district government on September 24

⁴⁴ From the interview with Public Works in Bantul district government on September 24

⁴⁵ From the interview with IRE on September 28

that local people in the area where IRE had a training workshop, knew about EPH, though the standard of IRE was not clear.

3-4-3 Analysis of the evidence

Though POKMAS basically includes the function of training on how to build earthquake-proof houses, we found that POKMAS did not always let people follow the governmental standard of EPH. POKMAS is a community-based program, including the organization so that people could be aware of EPH and the governmental policies about EPH. However, POKMAS did not work well in 20% of the cases as a government support; POKMAS groups, which did not follow governmental EPH standard, did not have the standard of housing.⁴⁶

Though local people have access to the information about how to build EPH and they might be aware of the effectiveness of concrete and bamboo housing construction, they do not always build concrete and bamboo houses. One reason is that local people think bamboo house might represent the family as “poor”.⁴⁷ Another reason is that they might still use wood or other material. They might prefer traditional wooden style house called Joglo and Limasan.⁴⁸ The officer of IOM mentioned that the use of bamboo sometimes implied low household income, so local people prefer not to use bamboo. In addition, the officer of Public Work told that only the Joglo style had survived in the earthquake in 2006, while most concrete houses were destroyed. Since that experience, many people still believe that the Joglo style is much stronger than concrete against earthquakes.

Since there are many standards of EPH, they may cause confusion about the desirable EPH materials among villagers.⁴⁹ Different actors have different perceptions about preferred EPH materials. For example, the Wikirsari Village leader strongly supported the Joglo style of housing. His opinion is based on the results of the earthquake in 2006, when only the Joglo style houses survived. The office of Public Work in Bantul District basically supports the use of concrete. The officer agreed that Joglo style might be better than concrete house, but he explained that to build Joglo is more expensive than concrete houses. According to the

⁴⁶ From the interview with National Unity and the Protection of Society in Yogyakarta provincial government on September 20

⁴⁷ From the interview with IOM on September 28

⁴⁸ From the interview with Wukirsari Village head office on September 23 and to Public Works in Bantul district government on September 24

⁴⁹ From the interview with Public Works in Bantul district government on September 24

questionnaire survey given to the local people in Wikirsari it was found that they do not recognize Joglo housing as a desirable. In summary, there might be a gap in the recognition of housing that is most desirable for EPH, between the local people and the government, as well as among local people themselves.

When we proposed the hypothesis, our understanding of POKMAS was limited and we assumed that the POKMAS system just provided money to local people. Therefore, this hypothesis has a negative perception about the local people's knowledge on how to build earthquake-proof houses. Through the field survey, we learned that POKMAS offered not only money but also organizational training and training on how to build earthquake-proof houses. Limited knowledge of POKMAS was one reason we found several pieces of evidence that disprove the hypothesis.

3-4-4 Conclusion

The result of the questionnaire survey may partly support the hypothesis because most respondents did not point out concrete as an earthquake proof material. However, the results of the interview survey showed evidence that disproves the hypothesis. Those who received POKMAS might know how to build EPH and the government has communication channels to tell local people the standard of EPH and importance of it. In addition, some NGOs also implement trainings for local people about EPH. Therefore, it is better to say that people know about EPH and how to build it, though the material is not always concrete.

Bamboo was not used for permanent housing, though it was strong enough to survive when earthquake occurred. In this sense, it can be concluded that bamboo is not used and not perceived as a desirable earthquake-proof material.

3-5 Hypothesis about comprehensive the DRR program: There are some constraints in the implementation of the comprehensive disaster risk reduction program run by the government

3-5-1 Evidence that supports the hypothesis

The results of interviews with each level of government show, on the government side, the provincial level and district level government offices have their own program for DRR policy, which is distinct from one another.

Based on the interview with Mr. Danang Syamsurizal, officer of the Planning Office at the provincial level, he said that in the action plans for the national and provincial governments cooperated with each other, but actually there are few opportunities to communicate with the district government because the only way to communicate is through official letter.⁵⁰

About the interview with Ms. Partini who is an officer in elementary education in Bantul District, though her position is under the provincial level of education, because of decentralization the district has the power to enact on its own programs, though it still has to get approval from the province about its activities.⁵¹

According to interviews with officers of Public Works in the district government, Mr. Sunarso and Mr. Anang, Pubic Works was forced to sign the JRF fund in 2006 without enough consultation, though it was a national level agreement.⁵² In the case of the district level of government, there was no agreement with the JRF. In the beginning of the rehabilitation stage, there was only POKMAS which came from the national budget and then later came the JRF. Since both were part of housing rehabilitation assistance fund, but independent from each other, that makes the entire process of distribution of housing rehabilitation assistance fund complicated. This is one example that indicates that this complex system made the fund distribution system insufficient and confused beneficiaries when they applied for aid. In addition, different actors have different standards regarding EPH. For example, the government has a “new concept of building.” Before introducing the concept, housing materials had been concrete, cement and brick, but after introducing the concept, emphasis was put on concrete with iron support polls. While the government has such standards, other actors have different standards. The IHCESAN Foundation, invested Rp. 360 million for 20 permanent shelters, which were built with GTZ funds. The JICA has also supported building houses based on its own standards. For the latter two data the respondents failed to mention the standards themselves. These results proved that there were different standards for EPH in Yogyakarta. Additionally, it was learned from the interview with the officers of IOM, Mr. Johan Grundberg, Mr. Hemowo Poetranto, JB and Mr. Yohan Gogon, that they have their own standards, which are concrete, cement, and extraordinary brick.⁵³

⁵⁰ From the interview with Planning Office in provincial government on September 21

⁵¹ From the interview with Ms. Partini on September 23

⁵² From the interview with Public Works in district government on September 20 and 24

⁵³ From the interview with IOM on September 28

3-5-2 Evidence that does not support the hypothesis:

The results of the interview with an officer of Public Works at the provincial government level, Mr. Gatot Saptadi, revealed that there is no conflict between national and local government policies because of local autonomy of disaster risk management that is under the regulation of upper level government.⁵⁴ In addition, according to the interview with the officer of elementary education in Bantul District, Ms. Partini, when it comes to DRR program, the district and provincial levels of education have a meeting in ST DRR.⁵⁵

As it was mentioned, with most of the interviews with the various stakeholders, though government activities were not well known to people during the immediate phase post-earthquake, the government has done various activities for disaster education, with the cooperation with other actors of DRR. The first one is the mapping activity, and second is the circulation of information. Regarding the mapping, from the interview with the village leader, Mr. Bayu, it was found that the government cooperated with JRF to map the vulnerable areas in the village and the data was to be reported to the district, provincial and the national levels.⁵⁶ Regarding information circulation, according to the interview to Mr. Supriyanto, the officer of National Unity and the Protection of Society in Bantul District, before disseminating information to local people, the office holds meetings with Public Works, the Financial Department, and the Planning Development Department in order to coordinate policies of each department. After that, they invite sub-district leaders to meetings to inform them of the government policies. From there the sub-district leaders inform village leaders. At the same time, information is circulated through RT leaders and finally to every household.⁵⁷

Public Works has been doing activities to plan and build schools, coordinating with district level education departments, and financial departments. The office also has a consults with school authorities about their school's status as to whether or not their school needs to be repaired or reinforced. Therefore, information is not directly addressed to the local people in the support of disaster-proof housing,⁵⁸ however, these coordination and consulting systems will improve the situation for local people in the end. In summary, the government has a well-organized DRR system in regards to the education department.

⁵⁴ From the interview with Public Works in provincial government on September 20

⁵⁵ ST DRR is a union made by KESBANGLINMAS (National Unity and the Protection of Society), UNDP, District and Provincial department of education

⁵⁶ From the interview with Mr. Bayu on September 23

⁵⁷ From the interview with Mr. Supriyanto on September 27

⁵⁸ DPH is comprehensive disaster-proof housing against disasters in general, not only earthquakes.

3-5-3 Analysis

In order to test our hypothesis we tried to answer some basic research questions that we used in order to evaluate the whole process of implementation of the comprehensive disaster risk reduction program.

After a thorough analysis on this process, like constraints placed by each government about DRR program, most of the respondents said they are just exercising their institutional rights, which they ought to enjoy by the power of the implementation of decentralization. Such exercise of power creates a new situation that can be viewed as a constraint in the implementation of a comprehensive DRR program. All actors that felt the responsibility of taking part in the formulation and implementation of DRR program may sometime convene with each other and share ideas but they don't have a single DRR program that can be viewed as comprehensive program. This also caused an overlapping of implementation of programs that leads to confusion, not only on the side of the common people, but also on the side of the service providers themselves. We have also seen that due to these multiple programs, another problem occurred within the ranks of the service providers. This problem was inter-agency program promotions of DRR which resulted in the dilemma of which program to promote, because each agency wants their program to be adopted.

3-5-4 Conclusion

Decentralization might cause less coordination of DRR policy between upper levels of government and the district level's government, though we found some measurement for promoting coordination among different tiers of the government in the educational department.

At the district level, it can be said that there are comprehensive DRR policies and programs. Different department agencies at the district level coordinated with each other for DRR and this coordination also linked with the sub-district level, village level and district level. In other words, there are both vertical and horizontal coordination regarding DRR policy and programs under the district level.

In terms of the cooperation with NGOs and other agencies outside of Indonesia, such as JICA, the government in Indonesia could improve by building more coordinated DRR policies and programs. Each agency's different aid systems relating to DRR may induce inefficiency or confusion of the entire DRR policy and program in Bantul.

Through the results of interview in Yogyakarta, we found that each institution tends to

have their own DRR program, and that sometimes this causes difficulties in coordination, however their DRR programs seem to be efficient enough to circulate information about disaster risk reduction and inform people of the knowledge about disasters, especially about earthquake and how to prepare for it.

4. Limitations

Our research tried to examine to what extent government policy regarding disaster education is transmitted to local people. We analyzed this point by investigating people's perception about disaster education policy, as well as the system for transferring governmental information regarding disaster education. Through these ways, we could evaluate people's understanding regarding disaster education policy and the effectiveness of the government's measures for announcing its disaster education policy. However, we were not able to completely understand what kind of knowledge regarding disaster education that the local people were able to obtain. We could, show several findings regarding the Ngasinan Elementary School pupils who showed a clear understanding of what to do when the earthquake occurred. In addition, some answers for question number 28 of the questionnaire: "If ever, another disaster comes, and do you have idea what to do in order to lessen the damage," demonstrated their knowledge of disaster education. However, it is not clear how much the school curriculum regarding disaster education contributed to increase the entire community's awareness about disaster education. In addition, many examinees of the questionnaire did not answer the question 28. In order to overcome this limitation, we needed to do more research on how students' knowledge regarding disaster education transmits to their parents or other adults in their community. We also needed to improve our questionnaire so as to grasp local people's actual knowledge regarding disaster education.

When we developed our hypotheses regarding EPH, we mainly relied on literature that only mentioned concrete and bamboo as earthquake-proof materials. Therefore, our hypothesis' scope of housing materials is limited to concrete and bamboo. However, through our survey, we realized that in reality, there are varieties of materials that can be used for EPH.

We also found that bamboo was not perceived as earthquake-proof material. Though bamboo is strong enough against earthquakes, it easily rots. Therefore, it cannot be recommended as earthquake-proof material for permanent houses. Further detailed discussions, which consider a variety of materials for EPH, might be required.

5. Conclusion

Our research focused on DRR policies and activities in the Bantul region. In particular, we formulated arguments concerning disaster education, EPH and the comprehensiveness of DRR policies and activities in the region.

Our hypothesis about disaster education was that the government could have provided more information regarding disaster education for people after the Java earthquake in 2006. In Wukirsari Village, local people tended to be more aware about NGOs' activities regarding disaster education than the government's activities because of the active role of NGOs and constraints within the governmental activities. In addition, although there are activities lead by NGOs to circulate governmental information, it does not necessarily raise the people's awareness of the government's policy. On the other hand, it might be said that government has provided enough information regarding disaster education to the Ngasinan Elementary School, so that the school was able to formulate a good curriculum for disaster education. Therefore, based on these observations, it can be said that the government may have successfully offered adequate information of disaster education for elementary schools while they might have not provided sufficient information for the village in general.

Our hypothesis about the situation of current EPH in the region was that the proportion of brick houses without concrete reinforcement is the largest in the village. The results of the questionnaire survey supported this hypothesis. However, in reality, the usage of sand, steel and cement had increased.

Another hypothesis related to EPH was that there were not additional supports by government other than POKMAS because of lack of local demand for disaster-proof housing. Before the field survey, we regarded POKMAS as a just fund for the reconstruction of houses,

thus the hypothesis meant that the government offered only financial support for local people as their EPH policy. However, our field survey revealed that POKMAS has the function of training people to learn how to build EPH. In addition, the government promotes construction of EPH by setting permission standards for building new houses. Also the government helps local people to build EPH through technical service centers. Therefore, we might not be able to say that there was little support by the government other than POKMAS. In terms of local people's demand for EPH, we understood that there were local people's complaints regarding the selection of households for POKMAS in Wukirsari Village. Through the questionnaire survey, we observed that local people have different demands related to EPH, while some government officers told us their office did not receive any requests from the local people other than POKMAS in terms of EPH. This point needs further research.

The last hypothesis related to EPH was that the local people have less access to the information about how to build concrete or bamboo houses, and are not well informed about the effectiveness of bamboo or concrete houses for disaster prevention. In terms of bamboo, our assumption was wrong; we thought bamboo was a better material for the earthquake-proof housing. Although it is actually strong enough to survive earthquakes, it rots easily and therefore, it is not suited for permanent housing. In addition, bamboo was perceived as sign of the poor, so local people did not want to use it. In the case of concrete, few people commented that it is a desirable material for earthquake-proof housing in the questionnaire survey. This fact may support our hypothesis, though there is the possibility that they just did not know the name "concrete" while knowing how to make it with cement, sand and rock.

Our hypothesis about comprehensive DRR was that there are some constraints in the implementation of comprehensive disaster risk reduction programs by the government. Although we found that there was less coordination among the upper levels of government, and between the government and foreign agencies, decentralization has made it effective for agencies at the district level to implement comprehensive DRR programs by making the most of the flexible coordination among different agencies linking district, village, and sub-village levels.

In this research, we could not consider the variety of materials for earthquake-proof housing because of limitations of knowledge before doing field survey. In addition, we were constrained in our analysis regarding the local people's actual knowledge about disaster education and limited to generalize our findings and analysis from one village and one school observation. Further research is needed to overcome these limitations.

Through our research, we might suggest following points to contribute to DRR policies and programs in Bantul region. First, since the disaster education curriculum seems to be well developed in Bantul region, it might be better to introduce and implement part of the curriculum directly to the local community as a kind of non-formal education. Second, it might be better to set a minimum platform and minimum common standard for DRR activities among the different agencies, especially between government agencies and non-government agencies or other country's official agencies. Such an example would be establishing an agreement on the basic requirements of earthquake-proof houses.

6. Appendix

6-1 Appendix 1: Items of questions on questionnaire survey

Dear interviewee,

We are students of Graduate School of International development Studies, Nagoya University, Japan.

We are doing research about earthquake occurred in 2006.

Thank you very much for your cooperation to answer this questionnaire.

Please answer following question.

If some question is not clear to understand, please ask us.

Disaster proof-housing

1, Sex

2, Age

3, Job & place to work

4, Do you have any roles such as "ketua RT atau RW" in your community? (If you think this question is not suitable to ask, please tell us.)

5, What is your family structure? (ex, me, father, mother, 2sisters)

6, How much was your house damaged by earthquake in 2006? (ex, roboh, rusak berat atau rusak ringan)

7, What types of materials were your houses made of before the earthquake happened? (ex,

cement, brick, bamboo, and combinations of steel & concrete)

8, Why did you use the material?

9, Do you know POKMAS? If you don't know POKMAS, please skip question from 10 ~ 12.

10, Did you use POKMAS, when you repaired your house?

11, If yes in the question 10, how did you manage the rest of money needed?

If no in the question 10, why did not you use POKMAS?

12, What types of materials are your new houses made of?

12-b, In your opinion, what are most desirable materials for tackling to earthquake?

13, What kinds of government support do you know?

14, What kinds of government support did you need except POKMAS when you built new house?

15, Did you use gotong-royong support when you built house?

16, What are the good points of gotong-royong support, and what are the points in which gotong-royong support need to be improved?

Disaster Education

1. Are you aware of any policy from the government at any level (national, provincial, district) about disaster risk reduction education?

a. How did you know about this policy?

b. What do you think about this policy?

c. Do you have any idea or suggestion in order to make this policy better or to make it suits your needs?

2. Do you have your own action plan in order to avoid too much damage when disaster comes? Please choose as many as you can.

a. In your community.

b. In your own family.

c. In your workplace.

Yes: From whom did you learn about risk reduction or action plan? Please choose as many as you can.

a. From the community.

b. From the NGO.

c. Within the family.

No: If ever, another disaster comes, do you have idea what to do in order to lessen the damage?

Terima kasih banyak atas bantuan Anda

6-2 Appendix 2: Result of questionnaire survey

Disaster proof housing

1,

Female	Male	N/A
4	24	1

2,

30-40 years old	41-50 years old	51-60 years old	61-70 years old
5	5	14	5

3,

- Self-employed, working place is 15km off the village
- Tile maker in the village
- Housewife
- Building contractor
- Craftsman of roof-tile from soil (he is worker and business owner) at his house
- I don't work, but sometime I work as masseur
- I'm working as crispy chips packer at my neighbor's house
- Farmer in rice field near from my house
- Roof maker
- Workshop in the house where I live
- Labor
- Entrepreneur
- Private
- Roof maker in Demi benda Wukirsari Imogiri

4,

Yes	No	N/A
-----	----	-----

1 (Ketua RT)	26	2
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5,

1-5 members	6-10 members	11-15 members	16-20 members	21-25 members
22	4	2	0	1

6,

Heavily damaged	Totally damaged	Totally collapsed	Collapsed	Flattened to the ground
16	6	4	2	1

7, 12, 12-b

Materials used for housing

	Brick	Steel	Wood	Sand	Clay	Bamboo	Cement	Stone	Concret e	Coral	Limestone	Asbestos
Before the earthquake	25	2	7	9	7	12	13	4	0	0	4	0
After the earthquake	14	14	5	15	0	0	18	6	1	2	1	1
Considered desirable by local people	22	21	2	18	2	0	14	4	5	0	0	0

8,

The reasons why people chose the materials

Economic constraint	Accessi- bility	Good Looks	Durability	Good quality	Bad looks	Common	Unable to meet the requirement	N / A
14	6	1	1	3	1	1	1	1

9,

Yes	No	N/A
23	5	1

10,

Yes	No	N/A
28	1	

11,

Those who answered yes

- All members of my POKMAS had made decisions through deliberation before they received POKMAS fund.
- One of decisions is both elderly member and the member. And those who need a priority were given precedence by all members. I got POKMAS fund latest. I bought materials for my house
- Together with all members of my POKMAS, we managed the money
- The POKMAS fund was received by member's POKMAS in 2 phases, 1st phase is 7 million rupiah and 2nd phase is 8 million rupiah. Then we bought materials together too
- I don't really understand about POKMAS. That is because my husband managed POKMAS. I only know a little, for example communities are divided into groups.
- The member of POKMAS received the POKMAS fund based on priority scale
- I received POKMAS fund distribution in 3 phases. 1st phase is 6 million rupiah for building the house foundation. 2nd phase is 4 million rupiah for buying steel, cement and other materials. 3rd phase is 5 million rupiah.
- I managed it based on materials of house and aspect of money.
- The member of POKMAS applied a priority scale for POKMAS member who got POKMAS

fund. I got the 1st phase and then I bought materials.

- My POKMAS member consists of 15 members. Based on priority scale, we decided 8 of members became 1st receiver of POKMAS fund.
- Based on deliberation, I got POKMAS fund on 2nd phase. I received POKMAS fund amounts 15 million rupiah directly.
- POKMAS fund to construct a house
- Some money to buy materials
- To buy rocks, cement, sand and concrete
- The money was used for materials and operational purpose
- To recover the damaged house. Steel, cement, wood, clay, steel and cement the most
- Some portion of the money to buy materials
- Some portion of the money for material and the rest for operational

13,

- 15million rupiah were provided from government. And government gave us a plan for building earthquake-proof housing.
- Government taught us how to mix cement or what kind of aggregate is better.
- Government's support is not much. Training were provided by a NGO (IOM).
- I remember only POKMAS, I forget another supports from government. I got a suggestion briefing that the use of money should be appropriated to POKMAS purpose.
- About house training or something like that, I remember that Posyanis training from UGM. Posyanis training is not government's program.
- I only knew about POKMAS, the POKMAS decision is using combinations of steel & concrete for the house building.
- I only knew that POKMAS fund. Money of POKMAS is set in community groups.
- Financial aid (refers to POKMAS), socialization of earthquake-proof housing
- I only knew POKMAS fund. It is 15 million rupiah.
- I think there is no support from government except POKMAS. I remember that government didn't give training support for me. But I ever participated in training held by IOM.
- Clothes
- Support to rebuild housing
- Counseling, fund
- Volunteer

- Gotong-royong
- Money amounting to 90 thousand rupiah per person, and counseling on disaster-proof house.
- Economy recovery
- Assistance fund
- There is no government supports except POKMAS.
- 15million rupiah were provided from government. And other aids were provided by NGOs.

14,

• I want government to simplify the procedure. When we got the aid, reports and receipts were required and these were troublesome.

- Teach us how to mix cement or cut the end of the steel frame.
- Provide job
- Nothing, but I really expected to get the working capital assistance from government.
- Training for house building
- I expected to get a loan fund. But I got nothing.
- Building permits
- I expected an aid material kind, but government didn't give it.
- Repair tools
- Clothes
- Gotong-royong
- Money
- Food
- blanket
- More POKMAS fund
- Assistance from PMI (Indonesian Red Cross) and counseling
- Counseling on earthquake-proof house
- Counseling on earthquake-proof house construction, assistance for entrepreneurship fund

15,

Yes	No	N/A
15	13	2

16,

The good point

- That reduces our burden.
- It is useful to remove the garbage or ruins on the road and etc.
- It fosters relation with neighbor.
- It is conducted mundanely and the cost is cheap. It is enough for providing food and drink. So far, it's OK. But, in the future, gotong-royong should be changed if family become to live separately and individualism prevail.
- The work become easy
- Togetherness
- Harmony
- Friendly
- Solidarity. I feel happy because same people helped me. I say thank for them
- Mutual help
- The cost become low
- Gotong-royong make the burden of work for the people who needed easier
- The work become to finish quickly
- Work could be completed faster

The point needed to be improved

- It is better the procedure is more simplified.
- When gotong-royong could not help me because of busy for much requirement of people, I felt I was excluded.
- When I truly needed gotong-royong, it couldn't help me.
- Increase the technical experience of building for the common people. That is because common people don't have the technical experiences of building. Their technical experience of building is less. It made the built of house not finished
- Knowledge of technical building. This is because sometime the community who work together (gotong-royong) does not appropriate to the guidelines of good building.
- Togetherness. If community can't be togetherness, gotong-royong can't be good.
- Increase gotong-royong of work quality because gotong-royong still poor in quality
- In need of repairmen and Togetherness
- Get suggestions/recommendations

- Cost saving effort

Disaster Education

1,

Yes	No	N/A
10	15	4

1a,

- Collected information with neighbors.
- Policy socialization at village government level, and from NGO
- Sub village head's policy socialization
- Join the training
- Counseling on disaster (earthquake) mitigation

1b,

- There was food support, but it did not go smoothly.
- Good because this policy always reminds community of earthquake.
- Good because I am aware of earthquake.
- Good because I can prepare myself beforehand.
- Good because more people get to know about disaster, and pay attention to it.
- Feel Safe, secure, and cautious.
- It must be cautious.
- It gives people experience.

1c,

- Good enough.
- It was hard to get information. Only a part of people who were close to officers could get more support.
- The policy socialization should be held not only in post-disaster period, but also in normal condition in order to make people and community remember about the danger of disaster.
- The policy socialization or information should be repeated.
- Stakeholders, such as village government should make disaster socialization routine, like once in 3 months.

- Disaster proof housing could be sustainable.
- Government must take account of this situation

2,

Action Plan

Yes				No	N/A
a. Community	b. Family	c. Workplace	Community and Family	0	1
5	17	0	6		

Learn from:

a. Community	b. NGO	c. Family	Community and NGO	Community and Family	N/A
3	19	0	5	1	1

Preparation to lessen the damage of future disaster

- I experienced evacuation drill with speaker in community.
- I attended the socialization meeting at RT level.
- I think myself get panicked when disaster happens.
- I think preparation is needed to lessen the damage.
- I suggest followings: take cover under the table, do not panic, and wear helmet.
- Having plan and being ready lessen the damage.
- I have plans: cover under the table, and run outside to the open field.

6-3 Appendix 3: Basic questions to each informant

6-3-1 Public Works (Provincial and District) and Planning Office (Provincial)

1. What kind of policies does Indonesia have about disaster education?
2. What is the role of your agency?
3. Are there any supports by government to disaster-proof housing other than POKMAS?
4. Is there any campaign letting people know the importance of disaster proof housing?
5. What kind of communication channel (inter-actor channel) do you have?

6. Do you have any inter-actor support system (in order to strengthen the inter-actor channel)?

6-3-2 National Unity and the Protection of Society (District)

1. What kind is the role of your office? We especially want to know more about; your role of “disaster education”, your role of “setting new concept of building” and Other roles related to Earthquake-proof housing

2. How does your office give information about governments’ support to local people?

3. Is there any local people’s demand/request about governments’ housing policies?

4. How do your office work together with other actors (for example: UUM and Office of Public Works)?

5. Is there any policy (law, rule or fund) to strengthen inter-actor cooperation for Earthquake-proof housing?

6. What is the average cost of building house before introducing new concept of building? And what is the average cost of building house after introducing that concept?

7. If you know, please tell us the average income of household in Yogyakarta and in Bantul

8. What kind of communication channel do you have?

9. Do you have any corroborate with other department in Disaster Education program?

6-3-3 Education (Provincial and District)

1. What kind of curriculum do they have about disaster education?

2. What is the role of your institution?

3. What kind of communication channel (inter-actor channel) do you have?

4. Do you have any inter-actor support system (in order to strengthen the inter-actor channel)?

6-3-4 Wukirsari Village Head

1. Are there any supports from government for disaster education?

2. Is there any disaster education for community members?

3. What kind of policies do you have about disaster education?

4. What role of your agency?

5. Have your village ever been received any public support for re-construction of village

housings?

6. If yes, what kind of support did you receive?
7. If it was a funding support, how much money did you receive?
8. How did you utilize the public support?
9. Who were the beneficiaries of this support?
10. How did your village reconstruct housing?
11. Did you know POKMAS? Did your village receive POKMAS?
12. What kind of communication channel (inter-actor channel) do you have?

6-3-5 Local People in Wukirsari Village

Same questions in questionnaire survey are used for the interview survey to local people.

6-3-6 School Principal in Ngasinan Elementary School

1. What kind of curriculum do you have about disaster education?
2. What is the role of your institution?
3. Does each teacher have the role when Disaster happens?
4. What kind of material do they use?
5. How do they train children on Earthquake happen?
6. Do they have the specific education for trauma healing?
7. What kind of communication channel do they have? (NGO/Government)
8. Are there any corporations with other school?

6-3-7 YP2SU and DRR Forum

1. What kind of project do you have about disaster education and disaster proof housing?
2. What is the role of your agency?
3. What kind of communication channel do they have?
4. Do you have any inter-actor support system (in order to strengthen the inter-actor channel)?

6-3-8 IOM (International Organization of Migration)

1. What is the role of your agency?

2. What do you think about POKMAS and how do you cooperate with POKMAS system?
3. What kind of communication channel (inter-actor channel) do you have?
4. Do you have any inter-actor support system (in order to strengthen the inter-actor channel)?

6-3-9 IRE (Institute of Research and Empowerment)

1. What is the role of your agency?
2. How does your office give information about its support to local people?
3. With what organizations (governments, NGOs RT/RWs) do you have relationships for earthquake-proof housing?
4. On what way does your office cooperate with other organizations?
5. What do you think about POKMAS and how do you cooperate with POKMAS system?

6-3-10 JRF (Java Reconstruction Fund)

1. What is the role of your agency?
2. What kind of communication channel do you have?
3. Is there any inter-actor support system?
4. Could you explain more about disaster map in Wukirsari Village?
5. What do you think about POKMAS and how do you cooperate with POKMAS system?

7. Acknowledgement

First of all, our research would not have been possible unless the enormous contributions from all informants who kindly gave their cooperation to us. We are most grateful to officers from Yogyakarta provincial government and Bantul district government, village head and people in Wukirsari Village, school principal, teachers and students in Ngasinan Elementary School, and staffs from NGOs. It is a great pleasure to thank those who made our research possible.

Then we would like to show our gratitude to Professor Shimada from GSID and Professor Ririn from Gadjah Mada University for sincere advice and warm encouragement. Our special thanks also goes to Professor Ngov Penghuy from GSID for all of the arrangements of our research. We are deeply in appreciation of their enormous support.

We are indebted to staffs from Gadjah Mada Univerisy to carry out our research with great assistance, kind support and hearty friendship. All of their efforts and contributions cooperated to make our research very meaningful. We would like to express our sincerest thanks.

Finally, Nia and Tiwi, our best translators, without your sleepless contribution, and your charming smiles, we may not reach to the end of our research. We wish our academic and personal friendship would continue forever. Thank you very much.

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Working Group 4
Tourism and Culture

**Desa Wisata in Local Community:
SUSTAINABILITY OF KASONGAN DESA WISATA**

1. Background
2. General Information
3. Kasongan general information- local industry and tourism
4. Administration of Kasongan Desa Wisata
5. Impact
6. Conclusions
7. Acknowledgement
8. Appendix
9. References

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1. Background

This research was conducted in the Kasongan area, Bantul District, Yogyakarta Special Region, Indonesia. The focus of this research is on the tourism and culture sector in Yogyakarta. In order to investigate the relationship between tourism and community, the tourism policy “Desa Wisata,” which in other words, refers to an alternative, pro-poor tourism policy, was selected. “Desa” means “village” and “Wisata” means “tourism” in the Indonesia language. Thus, Desa Wisata is translated to “Village Tourism” or “Tourism Village” in English. For this research, Desa Wisata will be the reference for the name of this policy as it is the official name in Yogyakarta. One of the villages designated as Desa Wisata is Kasongan, which is the case selected for this research.

This report consists of two parts. The first part is to clarify the actual situation of the administration of Desa Wisata, especially the roles of local people in the introduction process and management system. The second part is to evaluate the impacts of Desa Wisata from the aspects of economy, environment, culture, and society. The results of both parts are examined and evaluated in terms of the sustainability of Desa Wisata. All findings in this report are based on results of fieldwork.

1-1. Research Objectives

1. To clarify how each actor has played a role through the introduction process and the management system in Kasongan Desa Wisata.
2. To investigate the impact of TV in Kasongan in terms of economical, environmental, social and cultural aspects from the perspective of sustainability.

1-2. Research Hypothesis

“In the case of Kasongan Desa Wisata, local people are involved in the introduction process and management system. In addition, positive impacts on local the community are generated in terms of economical, environmental, cultural and social aspects.”

1-3. Research Methodology

In order to achieve the objectives mentioned above, a number of surveys were conducted. To observe the current situation of Kasongan, interviews were held with nine local people in Kasongan, eight civil servants (see Figure2), one researcher and 11tourists who visited Kasongan (29 people in total). In addition, questionnaires were given to 35 local people. The objective of holding interview surveys with local people, civil servants and the researcher was to determine how Desa Wisata was introduced in Kasongan and also to evaluate the management system of POK DARWIS. We also examined what impacts were caused by the introduction of DesaWisata. Interviews with tourists were conducted in order to examine their satisfaction with Kasongan DesaWisata. Questionnaires were also distributed to collect quantitative data related to the impacts on local people after the introduction of Desa Wisata.

Figure 1 shows the attributes of the Kasongan people who answered our questionnaire. In order to avoid a skewed sample by domiciles, respondents were chosen by locations of their workshops or houses (RT is the partition which divides land). As the Figure shows, however, relatively fewer respondents lived in RT 01 compared to those who lived in other RTs. In terms of gender, the proportion between men and women was almost equal. The age range among respondents was from 21-72, however, most of them were under 40 years old. The majority of them had four people in their family. In addition, the range of residence terms

Figure 1 : The attributes of 35 respondents in Kasongan

Variable	Range	Value (%)	
Gender	0 to 1	Male	49
		Female	51
Age	21-72	21-30	23
		31-40	46
		41-50	14
		51-60	6
		61-72	6
Family member	1to 5	1	3
		2	0
		3	10
		4	46
		5	14
		6	9
Location	1 to 6	RT01	6
		RT02	11
		RT03	23
		RT04	23
		RT05	23
		RT06	14
Range of residence (year)	1 to 6	1-10	14
		11-20	11
		21-30	20
		31-40	26
		41-50	11
		more than 51	9
Engagement of Desa Wisata	0 to 1	Yes	91
		No	9

in Kasongan had no specific bias among respondents.

Interviews with tourists included 10 domestic tourists and one international tourist. The international tourist was deliberately chosen to determine the opinions of those traveling from outside the country. Other respondents were from domestic areas that ranged in distance from Kasongan. Four respondents were from near places (20 minutes to 2 hours travel distance), while others were from more remote areas (4 to 7 hours travel distance). There was bias in terms of gender with 9 out of 10 respondents being women, as a result of the random sampling.

Figure 2: Interview list for civil servants

	Name	Date	Place	Position
1	Mr. Heri Lanfino	20 Sep. 2010	Yogyakarta government	Head of marketing division
2	Mr. Jono	22 Sep. 2010	Bantul tourism office	Secularity of tourism department
3	Mr. Trabul	22 Sep. 2011	Bantul tourism office	Head of tourism department
4	Mr. Sryandoro	20 Sep 2010	Bantul district government	Director of tourism programme
5	Mr. Bibi	21 Sep. 2010	Bangunjiwo office	Head of Bangunjiwo office
6	Mr. Andoyo	21 Sep. 2010	Bangunjiwo office	Head of development program
7	Mr. Widodo	27 Sep. 2010	Bangunjiwo office	Secularity of Bangunjiwo office
8	Mr. Muhardi	24 Sep. 2010	His house	Head of Kasongan Village
9	Mr. Subrujo	24 Sep. 2010	His Craftshop	Head of POK DARWIS
10	Mr. Afmad	26 Sep. 2010	His house	Former head of Kasongan Village

2. General Information

2-1. General Information of tourism in Yogyakarta and Bantul

2-1-1. Tourism in Yogyakarta

Characteristics of tourism in Yogyakarta and neighboring areas

Yogyakarta is located in the center of the island of Java. Yogyakarta has a strategic

position in the history of Indonesia's development as a nation-state. Yogyakarta has a lot of tangible culture, including Candi Prambanan (Prambanan Temple Compounds), various traditional buildings and handcrafts, such as batik and ceramics among others. There is also intangible culture such as traditional ceremonies and dances. These historical and cultural heritages currently have become the major tourist attraction for both international and national visitors. For Yogyakarta, the tourism industry is one of the most important industries. However, due to the earthquake in 2006, the tourism of Yogyakarta was affected greatly. For example, many historical and traditional buildings were destroyed. Therefore, the central government of Indonesia, such as the Ministry of Culture and Tourism and the other ministries, provided Yogyakarta with financial support for rehabilitating buildings.

Yogyakarta is ranked fourth as a tourist destination area in Indonesia, following Bali, Jakarta, and Batam. Tourists visit three districts in Yogyakarta. These are the Bantul district in the south, sharing 30 percent of the total visitors within Yogyakarta; the Sleman district, which shares 28 percent; and Yogyakarta City, which shares approximately 27 percent. Most of the foreign tourists go to the Prambanan Temple followed by the Sultan's Palace in the heart of the city. Other destinations are the Parangtritis beaches and Malioboro Street, which is located in downtown Yogyakarta. Local visitors prefer these destinations more than do foreign visitors. Borobudur, located in the northwest district (about 42 km from the center of Yogyakarta), is also a famous tourist destination.

Current challenges of tourism in Yogyakarta

The numbers of tourists are declining slightly in all Indonesian districts. Yogyakarta is in same situation. For the Yogyakarta government, the tourism industry has an important value to maintain financial conditions. There are several reasons for the decline. The first reason is the effect of earthquake, which occurred in 2006, and the lingering government concern regarding some safety issues. The second reason is the deterioration of the tourism environment, such as the problem of traffic jams, which leaves some tourists exhausted and dissatisfied. In the local context, when local community is a tourist destination, the local people are the key actors interacting with the tourists. In summary, the government is facing hard challenges to solve the severe matter of the decline of tourists. Therefore, they are trying to achieve new objectives for the tourism industry of Yogyakarta, as listed below

Tourism policy of Yogyakarta government

These are the tourism policies of Yogyakarta:

1. To improve the welfare of the people both materially and socially in Yogyakarta
2. To promote the preservation of culture and arts in Yogyakarta
3. To improve partnerships among the government, the private sector and the community
4. To improve the quality of human capital for those who are involved in tourism
5. To promote community capacity building with an increasing awareness of tourism in community

2.1.2 Tourism in Bantul

Characteristics of tourism in Bantul

Bantul is one of the districts in Yogyakarta. The population of Bantul was 820,541 in 2006. The area of Bantul is 50,685 hectare and consists of 17 districts. (BANTUL DALAM ANGKA, 2008)

There are two royal cemeteries and natural tourism resources such as caves, agro-tourism areas and beaches. Also, Bantul has many Desa Wisata with various characteristics and museums. Diverse kinds of handicrafts: batik, ceramic and carved leather are produced in Bantul. (BANTUL "SOUL OF JTWA" JOGJA)

According to the Bantul tourism office, 1,439,260 tourists visited Bantul in 2009. Domestic tourists accounted for 1,403,279 visitors and 35,981 people came from overseas countries. In brief, 98% of visitors were domestic tourists. In 2009, revenue of tourism industry was Rp 4,361,159,125. (Ministry of Tourism and Culture in Bantul)

Tourism policy of Bantul

According to an officer of the Ministry of Tourism and culture in Bantul, the main objective of tourism in Bantul is to directly empower the community in order to attain economical benefit through the tourism sector. According to Bantul government, 80% of the people who live in Bantul district are engaged in the handicraft sector. The government acknowledges it is important to educate them to develop Bantul District. Hence, they are also emphasizing human resource development under the tourism policy. They try to deal with issues related to market problems, as well as the traditional market.

Bantul government's promotion of the tourism industry

To promote the tourism industry in Bantul, the government is focusing on activities that seek investors through advertising. In the advertisements, the government explains the number of visitor and the benefits of investing in Kasongan. In addition, the Bantul government holds “Jawa promo” to promote Bantul’s activities. Sixteen sub-villages’ activities were selected for exhibitions held in Japan, Malaysia, Singapore and China twice a year. The Bantul government holds fashion shows and community forums and makes brochures, websites and galleries to promote handicrafts.

The selection process of Desa Wisata

Bantul government plays an important role in the selection process of villages to be certified as Desa Wisata. Firstly, the government receives application forms from local communities and then inspects these communities. Finally, the government authorizes the villages that meet their criteria for Desa Wisata, though this does not appear officially in the policy. In Bantul, 20 villages have applied and 10 villages were certified as Desa Wisata.

2.2 Desa Wisata as an alternative tourism policy

2.2.1 Background of Desa Wisata

In the 1980s, the concept of the Tourism Village, which is conducted all over the world today, arose as an alternative style of tourism growing out of the criticism towards mass-tourism. In the case of Indonesian, the concept of Tourism Village was introduced in Yogyakarta and the name was translated to Desa Wisata in the Indonesian language. The definition of Desa Wisata is “a village equipped with an original and unique rural setting (including social and economic, traditional culinary, culture, local customs and traditions, and local specific architecture) which could be developed and promoted further as a tourism destination.” (Priasukmana et. al., 2001) The principles of Desa Wisata include decentralization, local autonomy law, rural economic development strategy and community-based tourism. Desa Wisata is a new form, which offers tourists natural and cultural experiences that are closely related to the lifestyle of the particular communities. It is targeted to both international and local visitors who live in urban areas. Desa Wisata serves as a destination offering both relaxation and some special interest to them. As for international tourists, those from Japan and Australia are a large proportion of those that visit Desa Wisata in

Yogyakarta. In the case of Yogyakarta, there are more than 25 Desa Wisata. Each Desa Wisata has its own characteristics, which offer ceramics, traditional houses, batik crafts, etc.

To be appointed as a Desa Wisata, there are a minimum of requirements to be fulfilled including accessibility, community leadership, convenient climate, safe environment, accommodation and relationship with other tourism destinations. According to Priasukmana and Mulyadin, the following objectives of Desa Wisata [Soetarso and Mulyadin, 2001] are connected to the policy of the tourism industry:

- (1) Exploring the village potential for local economic development
- (2) Create jobs for local people
- (3) Ruralization: back to village campaign, managing the problem of overcrowded big cities
- (4) Promoting self-pride among rural youths
- (5) Improving social tolerance and social cohesion
- (6) Promoting rural vocational education in subjects related to tourism (foreign language, etc.)

2.2.2. Definition of sustainability in the case of Kasongan Desa Wisata

This research focuses on sustainability of Desa Wisata because sustainability is one of the key contents of alternative tourism development. In general, alternative tourism is a substitute of mass standard tourism. For example, ecotourism, responsible tourism, agro-tourism and etc, are recognized as alternative tourism. Although alternative tourism development is conducted all over the world today, there is no concrete definition of “alternative.” In the context of Desa Wisata in Indonesia, this research defines “alternative” as “sustainable.”

“Sustainability of Kasongan Desa Wisata is accomplished by both the administration of Desa Wisata by the Community Based Organization (CBO) and that resulting positive impacts on the local community in terms of economical, environmental, cultural and social aspects as a result of the introduction of Desa Wisata:”

In summary, this definition is based on these five aspects:

- A) Administrative aspect: Local people are involved in the introduction process and management system of Kasongan Desa Wisata.
- B) Economical aspect: Kasongan Desa Wisata further stabilizes income of local people.

- C) Environmental aspect: Local people pay more attention to the environmental situation in Kasongan.
- D) Cultural aspect: Local people accept the change of culture.
- E) Social aspect: Social cohesion among local people is improved.

3. Kasongan general information- local industry and tourism-

3-1. Research site, Kasongan

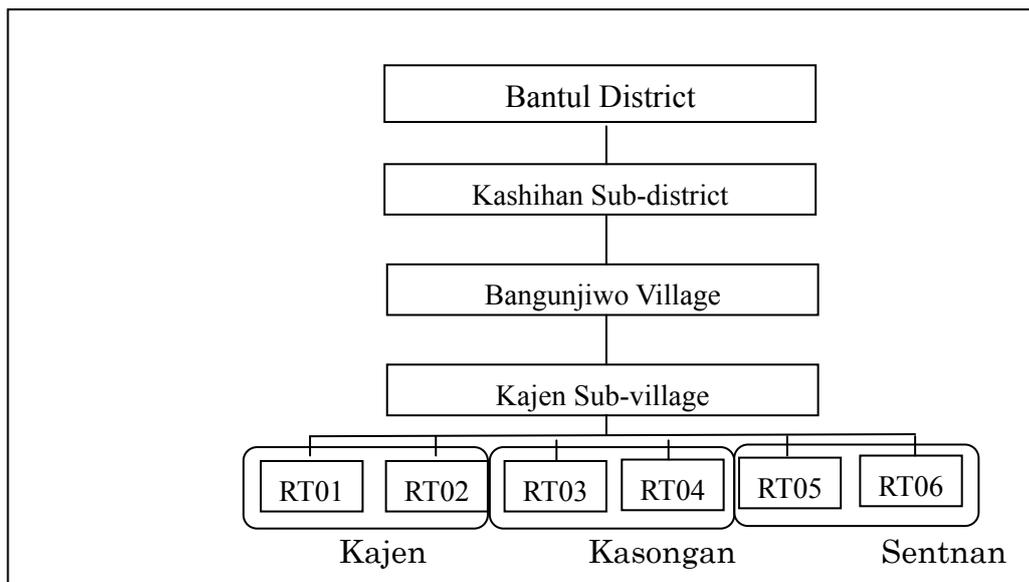
In this research, Kasongan Desa Wisata was decided as research site. Kasongan Desa Wisata is one of Desa Wisata in Bantul District and famous for its ceramic industry which, entails a specific characteristic of the Kasongan Desa Wisata. Kasongan is in the southern area of Yogyakarta. It is located 6.5 km from the center of Yogyakarta. The dimension of Kasongan is 407 hectare, which are divided into six areas presented in Table 1-2. The population of Kasongan is around 1400.

Picture 1: The gate in front of “Kasongan”



Table 1 shows the administrative structure in Indonesia. Kajen sub-village is divided into six areas. In fact, Kasongan consists of only RT 03 and RT 04 in the Kajen sub-village. An RT is a minimum administrative segment in Indonesia. However, the actual research site consists of six areas, representing RT 01-06, generally known as the Kasongan Desa Wisata.

Table 1: Administrative structure in Indonesia



History of the ceramic industry in Kasongan (-1970)

Producing ceramics has been a common profession for generations in Kasongan. The production of ceramics began around 320 years ago in Kasongan. (Ponimin, 2005) Thus, this area has a long history in ceramic production.

Around 1925, production of ceramics developed mainly into the production of pottery/vases. During this era, the creation process was mostly responsibility of women, while the men provided the clay and were responsible for the firing and marketing. (Ponimin, 2005)

During the Dutch colonial period (1800-1942), ceramic production began in Kasongan. It is said that villager found a dead horse owned by Dutch detective on his rice field. He was afraid of punishment and therefore, gave up his land ownership. Other villagers followed him resulting in the local people becoming ceramic craftsmen. This tradition has continued to the present.

The village has developed traditional techniques for producing ceramics. According to the interview, craftspeople mainly created saving boxes in the shape of frogs, turtles, roosters, and elephants, as well as cooking devices. In the 1970s, the ceramic production began to experience a fairly rapid progression. Modern influences and culture entered Kasongan through various media outlets and Kasongan was introduced to the public for the first time.

History of the ceramic industry in Kasongan (1970-)

As revealed through interviews, two prominent artists in the 1970s were involved in Kasongan ceramic production. One artist, Sapto Hudoyo conducted trainings for improving skill and technique in making ceramic products. Another artist, Suliyantoro Sulaiman introduced Kasongan to Jakarta. Therefore, local people in Jakarta came to know Kasongan as a famous village that produced quality ceramic products. She also held exhibitions in foreign countries to expand the market overseas. Due to this movement, the ceramic products became more modern and artistic.

The main series of production mainly used to be cooking devices, but due to exposure in the global market, the products today are mainly chairs, tables and pots. Commercial, large-scale production started in the 1980s. This then led to the beginning of the exports of products to foreign countries.

In 1995, Desa Wisata was introduced in Kasongan. According to the questionnaire and interview survey, 95% of people, or about 660 workers, who live in Kasongan are working in handicrafts. The remaining 5% of the population is managed in the agriculture sector or civil servant jobs. Of the people surveyed, 91 % answered that they are involved in Desa Wisata through the ceramic industry.

Current situation of Kasongan

There are many ceramic products shops on both sides of the street in Kasongan Desa Wisata. Various ceramic products made in Kasongan Desa Wisata have spread to international markets. Export of ceramics has increased compared to the period before the introduction of Desa Wisata. Hence, the increase in numbers of visitors who visit Kasongan mainly for ceramic goods has also increased, resulting in a demand for goods and more tourists visiting Kasongan. However, increasing the production of more ceramic goods means that there must be more red land, which is obtained from a near-by village. This is necessary for making ceramic goods, but the amount of red land is limited. In addition, an increase in production means a deterioration of the environment, through the increase in firing which emits smoke into the atmosphere.

Tourism development in Kasongan

Kasongan has historically prospered due to the ceramic industry through its many tourists. Hence, the Indonesian government acknowledges the significance of Kasongan Desa Wisata in order to further promote tourism development. For Kasongan, the ceramic industry is

one of its special features. The ceramic industry is their vehicle for attracting more tourists and to promote Kasongan from the aspect of tourism. Kasongan aims to emphasize tourism development through the introduction of Desa Wisata. The government also recognizes that for the purpose of encouraging tourism development, it is inevitable to include the local people's participation. It can be said that, the linkage of the local people with the ceramic industry aimed at tourism is crucial in Kasongan. In other words, tourism development in Kasongan is conducted in line with the policy of the Yogyakarta government.

4. Administration of Kasongan Desa Wisata

4-1. Introduction Process of Desa Wisata in Kasongan

Desa Wisata Policy was introduced to Indonesia as one strategy of Pro-poor Tourism. As we explained in Chapter 2, the ceramics industry in Kasongan has had a long history and many tourists and buyers had visited Kasongan. Although the place of Kasongan is not in the city, it had the potential to become a tourist destination because it has had the ceramic industry as a core attraction for tourism. As per the requirements from government (see Table 3-1), Kasongan was approved as Desa Wisata in 1995.

In general, to be selected to become a Desa Wisata, the local residents have to submit an application form to the government. However, in the case of Kasongan, a government officer, who chose the pottery industry, introduced Desa Wisata policy as a tourism or industrial development strategy. The officer of tourism and culture in Bantul considered that tourists and buyers going to Kasongan might increase by giving the name of Desa Wisata. Perhaps, in this early stage, Desa Wisata might be called a "political tool." Mr. Afmad, who was the mayor of Kasongan from 1962 to 2002, states in his interview, "I do not know even when Kasongan was approved as Desa Wisata. Desa Wisata was introduced by the government-led." Thus, the introduction of Kasongan was not made by the initiative of residents, but rather as a top-down approach by the government, without involving the participation and voices of local people.

4-2. Management system of Desa Wisata

4-2-1. Current situation of Kasongan Desa Wisata

In order to achieve the purposes of Desa Wisata, which is the empowering of the community, it is crucial to have a well-functioning management system based on local people's participation. However, in the early days of Kasongan Desa Wisata, the concept of Desa Wisata was not established among the local people of Kasongan.

Since the early 2000s, the importance of involving local people in Desa Wisata policy began to be recognized among the prefecture and district governments. From an international context, in some Desa Wisata of Bantul, "POK DARWIS" had been created as a community based organization. In the case of Kasongan, "KAJIGELEM" was established by the initiative of chairman of Bangunjiwo Village in 2008, and POK DARWIS was also organized as one of the activities of KAJIGELEM in the same year. POK DARWIS has carried out important roles in Desa Wisata of Kasongan. It is organized under the control of the Office of Tourism and Culture in Bantul. Moreover, they have another organization, which is called Unit Palayanan Teknis (UPT) and is organized under the control of the Office of Industry, Trade, and Cooperation in Bantul. Table 3-2 shows the structure of POK DARWIS and UPT. A more detail explanation about the roles of the four key organizations in Desa Wisata follows. These four organizations are the Bantul government, KAJIGELEM, POK DARWIS, and UPT.

Table 2: Desa Wisata requirement in Indonesia

<ol style="list-style-type: none">1. Have good accessibility, so that it can be reached by tourists via various modes of transportation2. Have interesting objects such as nature, art and culture, legends, local foods, etc. to be developed as tourism objects3. The people/community and the local government officials will welcome and give strong support to the tourism village and also to the tourists that come to the village4. The security is guaranteed

Source: Soetarso and Mulyadin [2001]

4-2-2. Role of each stake holder in Kasongan Desa Wisata

Bantul government

The Bantul government has two offices concerned with Kasongan Desa Wisata. One is the Office of Tourism and Culture, and the other is the Office of Industry, Trade, and Cooperation in Bantul. The main activities for the Office of Tourism and Culture are to promote activities for improving the number of buyers and investors for Bantul. There are exhibitions held twice a year in Asian countries such as Japan, China, Malaysia, and Singapore. They have also played a role of selecting Desa Wisata in Bantul. After receiving applications from the village groups, they visit the candidates, and finally select the appropriate places for Desa Wisata, based on the requirements. Finally, the government plays the role of monitoring Desa Wisata by keeping in contact with the local Desa Wisata offices. In Kasongan's case, meetings between officers and the local leader are held once a month. The officer of tourism and culture stated in the interview that the main discussions are about the promotion of tourism in Kasongan during these meetings.

The Office of Industry, Trade, and Cooperation of Bantul has conducted the following three activities: 1) training for local craftsman; 2) investing money for constructing buildings that are used for the training of the craftsman and workshops for visitors; and 3) management of the UPT on a monthly basis. This office has played an important role in terms of the improvement of Kasongan's ceramic industry.

KAJIGELEM

KAJIGELEM was established in 2008, under the suggestion by the head of Bangunjiwo Village. The KAJIGELEM project has also joined not only Kasongan, but also the other three sub-villages, of Jippangan, Gendeng, and Lemah Dadi, located in Bangunjiwo Village. There are two objectives of KAJIGELEM. The first is to restore the environment destroyed by the earthquake in 2006 and the second is to strengthen the relationship of the four sub-villages in terms of economic and social aspects. Today, Kasongan plays the central role, turning Kasongan's previous experience to an advantage. Members of KAJIGELEM are composed from each of the four villages, especially local business leaders and officers in Bangunjiwo.

POK DARWIS

POK DARWIS is the most important key organization in Desa Wisata policy. Their role is being a mediator between the Office of Tourism and Culture and the local craftsman. As explained above, POK DARWIS of Kasongan was established in 2008 as one of the KAJIGELEM's activities. Because of limitation of human capital, they cannot make POK DARWIS only in Kasongan sub-village. The objective of POK DARWIS is to promote tourism of Kasongan Desa Wisata and to empower the community. There are four activities. First is to be a guide of Kasongan Desa Wisata for guests introduced by the Bantul government, while the second is the management of the home stay enterprise. Third is education for improving the guiding skill and fourth is to hold meetings with the Office of Tourism and Culture in Bantul. Although one objective is to empower the community, the main activities have focused on the promotion of tourism and to invite buyers and investors to Kasongan. From this reality, we can say that there is gap between the objective and practice in the POK DARWIS policy of Kasongan.

The head of POK DARWIS is Mr. Subrujo, who was the officer in Bantul. Now he is manager of big pottery enterprise in Kasongan. As explained above, POK DARWIS was created as a community based organization, as stated by the officer in the Office of Tourism and Culture in Bantul. Along with this principle then, basically the members of POK DARWIS should be all the craftsmen in Kasongan. However, many craftspeople who live in Kasongan do not know the existence of POK DARWIS. In the results of the questionnaire, in response to the question "Do you know the POK DARWIS," only 27% craftspeople said "yes", while the remaining 73% people said "no". Thus, the local people of Kasongan have not recognized POK DARWIS. Therefore, it is difficult to say POK DARWIS is a community-based organization.

Unit Palayanan Teknis (UPT)

The Unit Palayanan Teknis which called "UPT", (in English, Technical Service Unit), was made under the control of the Office of Industry, Trade, and Cooperation in 1970s in Kasongan. UPT have organized all villages that have a local industry such as pottery or bamboo. The objectives of UPT are to improve the skill of production of the local industry and to offer visitors learning opportunities to know of the local industry. Therefore, main activities of UPT are training of special techniques for local craftspeople, holding workshops for visitors, and conduct statistical survey in each industrial village. The members of UPT are all of craftspeople who live in Kasongan. Workshop activities and training for craftspeople have

been often conducted by UPT. Thus, activities of UPT greatly contribute to the ceramic industry of Kasongan.

4.3 Summary

The research question about the administrative aspect was: “How have local people been involved in the introduction process and management system of Kasongan Desa Wisata?” Throughout interviews, questionnaire survey and observation, it was found that the local people’s participation and voice have not been involved in the introduction process and management system of Desa Wisata. The authority and management system have been grasped by only a limited number of local people, such as local business leaders and civil servants of Bangunjiwo. In order to involve the local people of Kasongan into the management system of Desa Wisata, POK DARWIS must be able to play an important role. However in the results, POK DARWIS has not worked based on all of the local people’s participation. Under this condition, we cannot say POK DARWIS has worked based on the local people in Kasongan.

Moreover, we found out that the structure of Kasongan Desa Wisata has weighted economical supremacy in terms of administrative and practical measures. For instance, the current activities of POK DARWIS are primarily concentrating on how to attract buyers and investors from outside. Given the above situation in Kasongan, we can state that POK DARWIS has forgotten the original principle of a tourism policy based on local people, running only for commercial purposes.

Table 3: Stakeholders of Kasongan Desa Wisata

	NAME	Jurisdiction	Main Activities in Tourism and industry of Kasongan Desa Wisata
1	Bantul Government	Yogyakarta Government	<ol style="list-style-type: none"> 1. Financial Support (In order to maintain environment of infrastructure in Kasongan) 2. Promotion (In order to increase number of buyers) 3. Management (Meeting with POK DARWIS) 4. Training
2	Babngunjiwo Office	Bantul government	<ol style="list-style-type: none"> 1. Promotion 2. Organizer of "KAJIGELEM" 3. Contact to Bantul government
3	KAJIGELEM	<ol style="list-style-type: none"> 1. Office of industry, trade, and cooperation in Bantul government 2. Office of tourism and culture in Bantul government 	<ol style="list-style-type: none"> 1. Maintain infrastructure of Bangunjiwo village by using financial support of Bantul government 2. Promotion in order to increase buyer and investor 3. Introduction of Tourism Attraction in 4 sub villages for visitors 4. Introduce special product of four villages each other 5. Meeting with mayor of four sub villages in order to improve cluster development in Bangunjiwo village
4	POK DARWIS "KAJI GILEM"	Office of tourism and culture in Bantul government	<ol style="list-style-type: none"> 1. Guide Kasongan Desa Wisata for Guest who came from both of International and Domestic by introduced Bantul government 2. Management of Home stay Enterprise 3. Education for improving Guide skill 4. Meeting with office of tourism and culture in Bantul
5	UPT	Office of industry, trade, cooperation in Bantul government	<ol style="list-style-type: none"> 1. Promotion 2. Training for craftspeople 3. Workshop for Visitors or Educational Institution 4. Statically Survey 5. Contact to Office of Industry, trade and cooperation
6	Crafts people	<ol style="list-style-type: none"> 1. POK DARWIS "KAJIGELEM" 2. UPT 	<ol style="list-style-type: none"> 1. Making and selling pottery 2. Joining the training given by UPT and Bantul government

5. Impact

5-1. Economical aspect

There are more than four economical impacts caused after Kasongan was authorized as Desa Wisata and all are positive. Some of these are increase of tourists, buyers and income, and the change in expenditure structure, among others. In addition to these impacts, three major challenges are found in the current situation.

5-1-1. Findings

Increase of tourists

More tourists started to visit Kasongan compared the situation before the introduction of Desa Wisata. According to the results of the questionnaire survey to the local people, 97 % of the respondents stated that the number of tourists who visit Kasongan increased after Kasongan became Desa Wisata. In addition, the results of our questionnaire survey given to tourists show that 7 out of 11 respondents recognize Kasongan as Desa Wisata. They also stated that they became aware of Kasongan as Desa Wisata through various media such as TV, magazines, the internet, etc. Three out of 11 respondents visited Kasongan through sightseeing tours. There are a lot of websites about Kasongan on the internet and some of them are written in both English and Bahasa Indonesia (Indonesian official language). The website YOGYES.COM, whose aim is to introduce Yogyakarta, for example, has a page to explain about Kasongan. On the page, there are six URLs of tour agencies that have tours planned to visit Kasongan as one of the destinations. These facts show that there are many promotions of Kasongan as Desa Wisata directed at both inside and outside of Indonesia. Furthermore, as a result of these promotions, the numbers of tourists have increased in Kasongan.

Picture 2 Around a bus stop, a tourist bus and tourists



Increase of buyers

Kasongan became more famous as Desa Wisata, not only for tourists, but also more buyers started to visit Kasongan. In our interview survey given to local people, several crafts people mentioned that the recognition of Kasongan as Desa Wisata contributes to increased buyers. This change reduces the amount of the local crafts people's work because the buyers make the trip to the economical centers, such as Yogyakarta City, in their place, in order to sell their products. In interviews, some crafts people say that they used to go to Yogyakarta city to sell their products or exported them, however currently it is not necessary to do such a thing and that reduces their burden. These results of the survey demonstrate the relation between the introduction of Desa Wisata and the increase of buyers. As a result, local people obtain more chances to sell their products to buyers and reduce their time and effort to hawk at remote places as well as the cost to export their products. This is the second positive impact caused by the introduction of Desa Wisata.

Increase of income

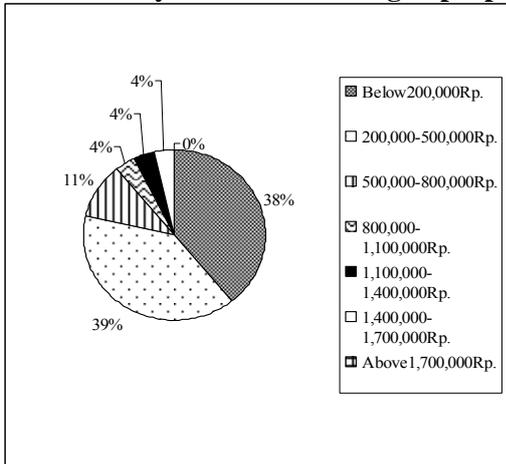
The third point about economical impact is the increase of local people's income. Through interviews with the local people, some say that their income has increased from the authorization of Desa Wisata. The results of the questionnaire survey also strongly support this. Though incomes of the majority are from 200,000 Rp. to 500,000 Rp. in 1995, in 2009, most can earn more than 1,700,000 Rp. per month (Figure 3, 4). Additionally, some crafts people refer to the causal relationship between the increase of income and that of tourists and buyers, with the latter contributing to the former. These findings indicate that the introduction of Desa Wisata had a positive effect on the local people's income through an increase of tourists and buyers.

Change of expenditure structure

Because of the increase of income, the expenditure structure of the local people has also changed in some aspects after the introduction of Desa Wisata. According to the results of the questionnaire survey, currently Kasongan people spend more money on education, savings and medical care compared to 1995 (See Figures 5, 6 and 7). These results show that the local people's living standards generally became better during the period from 1995 to 2009. A crafts person also mentioned that the authorization of Desa Wisata led to the increase of income and that it improved living standards in such aspects such as education. These results demonstrate

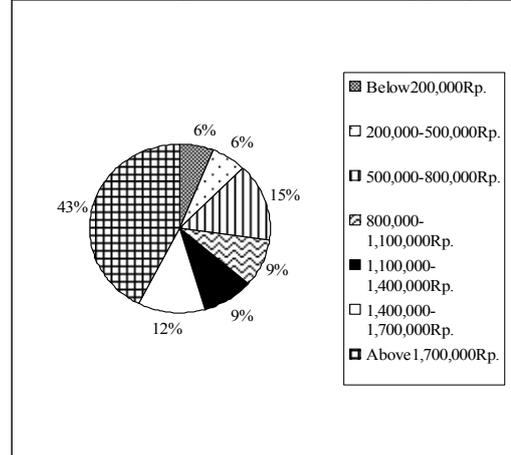
that the increase of local people's income caused after the introduction of Desa Wisata improved their living standard to some extent.

Figure 3: Monthly income of Kasongan people in 1995



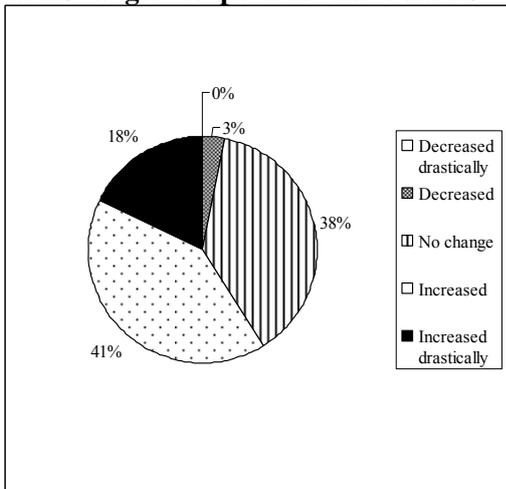
Author (2010)

Figure 4: Monthly income of Kasongan people in 2009



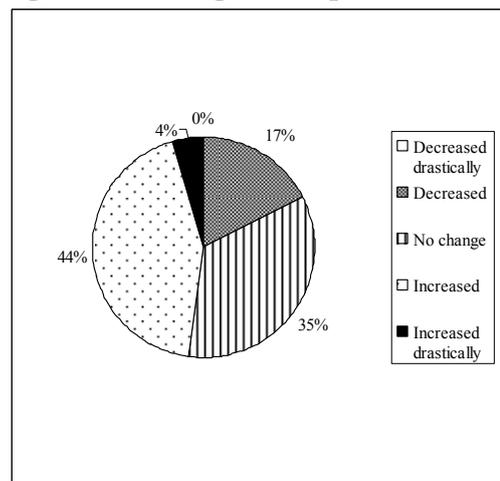
Author (2010)

Figure 5 Change in expenditure structure /medical care



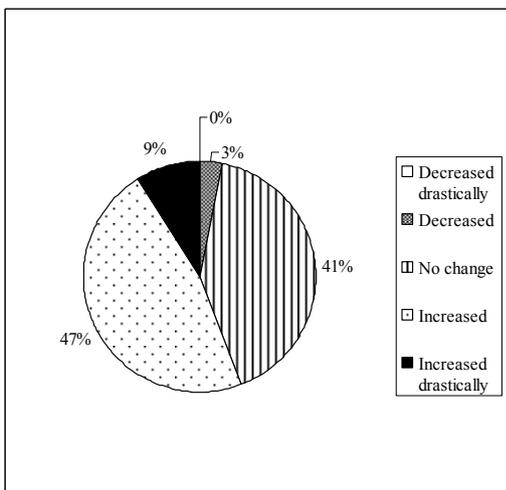
Author (2010)

Figure 6: Change in expenditure structure



Author (2010)

Figure 7: Change in expenditure structure



Author (2010)

Other positive impacts

There are other impacts in regards to economic aspects including the appearance of new occupations, decrease of unemployment and improvement of infrastructures.

Firstly, the introduction of Desa Wisata increased job diversity within Kasongan. A crafts person stated that the introduction of Desa Wisata brought new industries, such as paint shops, food courts, home stay enterprises and restaurants.

Secondly, the authorization of Desa Wisata brought about a decrease in unemployment within Kasongan. Through the interview survey given to the local people, a crafts person mentioned that more people were able to engage in the ceramic industry after Kasongan had become Desa Wisata.

Improvement of infrastructure is the third point. Kasongan had some issues with infrastructure, such as bad condition of the roads. However, the introduction of Desa Wisata improved the situation to some extent. According to the Bantul District government, construction on some infrastructure in Kasongan resulted in better access to Kasongan from the outside.

The other economic impact is the introduction of skill training. In our interview survey, a crafts man stated that the introduction of Desa Wisata brought them an increase of skill trainings given by government, such as training of finishing processes (the last process of making ceramic products). These trainings have raised their technique for making their products.

Skill training can increase local people's income, and the other impacts improve their living standards.

Current challenges

Stiff competition

While all the economic impact of the introduction of Desa Wisata is positive as already explained in detail, currently Kasongan is facing some problems related to its economy. Stiff competition is one of these challenges. As Kasongan becomes more famous for ceramic products, the number of crafts people also has been increasing. According to the result of our questionnaire survey, 34% of respondents got involved in Desa Wisata within the last 10 years. On the other hand, some crafts people say that the number of buyers who visit Kasongan has not changed. This situation of imbalance between the number of crafters and buyers, leads to stiff competition inside of Kasongan. Furthermore, local people are facing competition

between Kasongan and the outside. There are some countries that export products similar to Kasongan's, such as South Korea, China, Thailand and Vietnam. Because of these multiple factors, the Kasongan people cannot raise the prices of their products.

Lack of natural resources

Another problem is lack of natural resources. In order to make ceramic products, fire wood and red land are essential materials for Kasongan people. However, firewood has been imported from the outside of Kasongan (Karimantan). This situation leaves their production vulnerable to a dependency on external factors. For example, if the transfer of firewood falls behind schedule their production also will become delayed. However, a more important thing is the lack of red land. Although red land is another essential material in ceramic production, currently only few areas are in Kasongan. Most of the red land has been imported into Kasongan from another district (Godean, in Sleman District). Because of the distance, transportation cost is high when they use the red land from Godean and even the land inside Kasongan tends to be expensive because of its scarcity. These factors have raised production costs.

Revenue decreases

Because of these factors, in short, low prices and high costs, currently revenue from selling ceramic products has been decreasing. Given that many people mention this in the interview survey, it is one of the most serious problems for the current situation.

Vulnerability on exports

Though many ceramic products have been exported to other areas or countries from Kasongan, there are some problems regarding exports. Currently, income of some local people depends heavily on exports in order to avoid from the problem of copying. According to a handicraft worker interviewed, he tried not to sell his products in Kasongan in order to protect them from copying by other crafters. However, export from Kasongan has been affected seriously by external factors such as currency crisis, Bali bombing and the earthquake in 2006. In each case, income of the local people decreased drastically. These findings demonstrate that the economic foundation of these people, whose income depends mainly on exports, is vulnerable to external factors.

Economic gap among local people

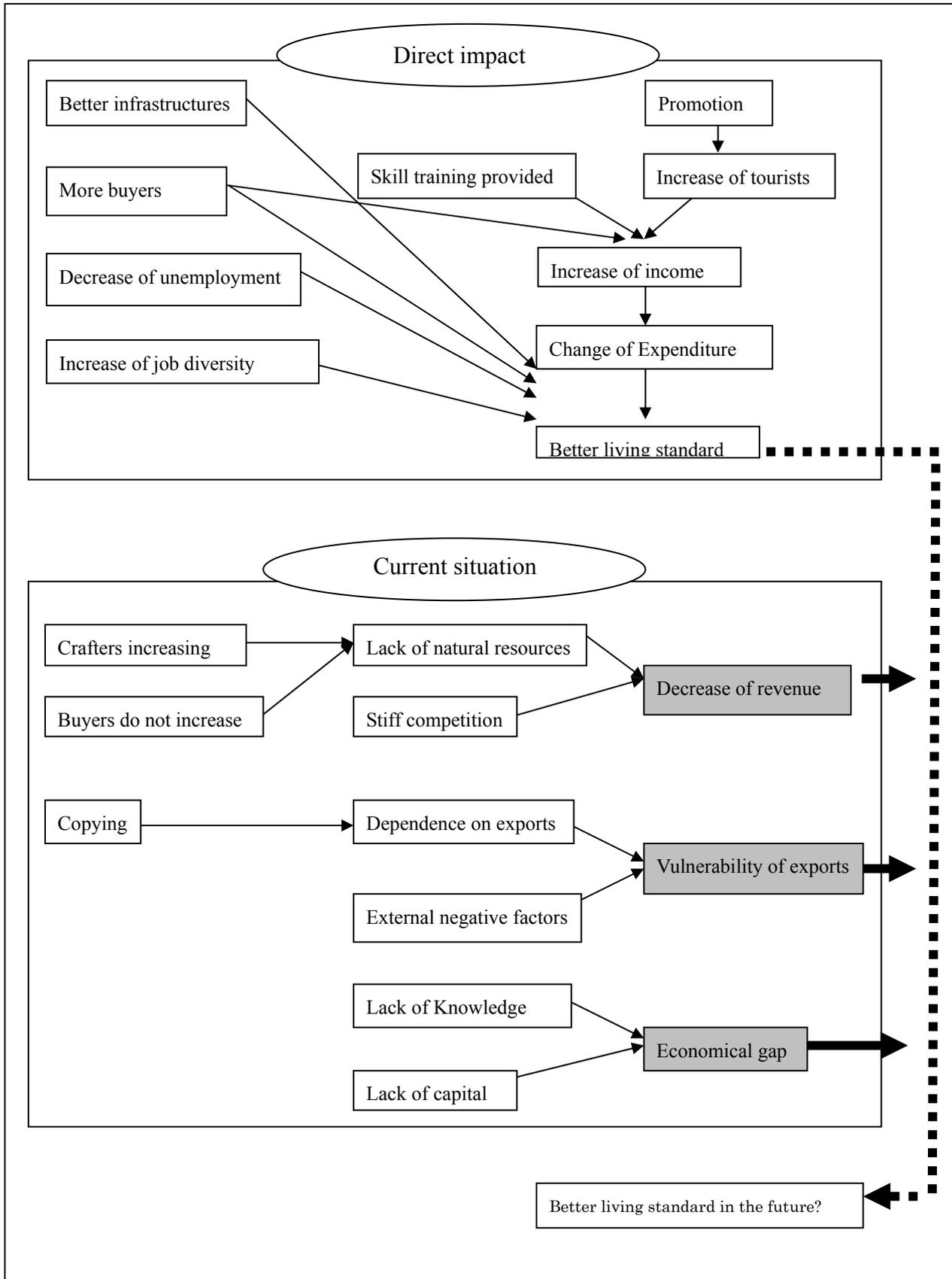
There is an economic gap between owners of large factories and those of small/middle workshops. One of the major reasons is that those who own small/middle workshops have no sufficient knowledge of to improve their economic condition. One of the crafts people explained it when he mentioned that he does not know how he can increase his income. There are no systems to transfer knowledge from owners of large workshop to those of small/middle workshops, which is essential to enter markets directly. According to the Bangunjiwo office, organizations supported by government, such as POK DARWIS, are reluctant to accept local people, except for some extremely wealthy ones, into the organizations because they do not have a sufficient educational background or networks with the government and markets. In short, such organizations do not need local people's participation because they regard it is them as being of little use. Therefore promotions conducted by the government are aimed at only the large workshops and owners of small/ middle workshops hardly have chances to access markets or to even obtain information about them. Furthermore, lack of internet facilities is another reason for a shortage of information. Although there are some websites established by Kasongan people, they are generally managed by large workshops¹ and that means only large shop owners can enjoy the information gained from the internet. Lack of the internet facilities makes it difficult for small/middle workshops to access markets outside of Kasongan directly by themselves.

Another important reason for the economic gap within Kaongan is the lack of capital. In Kasongan there is a lot of "Koperasi," or organizations which lends money to workshop owners. However, many small workshop owners are regarded to have no credit and cannot access loans. In short, most of Kasongan's local people have no way to increase their economic standing, due to a lack of sufficient information and capital.

Figure 8 indicates connections between the economic impacts caused when Kasongan was authorized as Desa Wisata and its current challenges.

¹ For example, we can see a website directly created by local people here:
(<http://www.potterykasongan.com/>)

Figure 8: Flow chart of economic impacts and current situation



5-1-3. Summary

This section described the economic impacts brought about by the introduction of Desa Wisata and our hypothesis that “Desa Wisata has further stabilized the income of local people.” In summary, as explained in detail, the authorization of Desa Wisata increased the local people’s income mainly through an increase in tourists who visit Kasongan, as well as more training for skill development. As a result, living standards also improved in various points, such as better change in the expenditure structure, an increase in job diversity, better infrastructure, and job creation. Among others, the increase of income and change in expenditure structure are perhaps the most significant findings. These results of the survey shows that the introduction of Desa Wisata succeeded in attaining not only an increase in the amount of income, but also improvement in living standards. These findings support our hypothesis.

All economic impact caused after Kasongan became Desa Wisata is positive, however, currently there are many challenges in Kasongan. Revenue of ceramic products has been decreasing because of stiff competition inside and outside of Kasongan and the inability to reduce production costs due to the lack of natural resources within Kasongan.

Exports of products are subject to external factors and the financial scale is quite different between small/middle workshops and large ones. Due to time and limitations in this survey, specific connections are not found between the introduction of Desa Wisata and these challenges. Despite this limitation, the results of the survey show, indeed Desa Wisata contributes to Kasongan’s economy and its sustainability. Future studies can address the relationship between the authorization of Desa Wisata and current challenges revealed by the research.

5-2. Environmental aspects

Throughout the limited literature reviews and documents related to Kasongan Desa Wisata, it became clear that more and more tourists have been visiting Kasongan Desa Wisata due to the exposure of its traditional ceramic products on the global market since the 1980s. Despite still today, the majority of the tourists visiting Kasongan are domestic tourists, buyers from Europe and from other southeastern countries, who can be found in the village quite often.

From the information acquired prior to the fieldwork from an environmental aspect, there were main two predictions for Kasongan Desa Wisata;

1. The local people in Kasongan Desa Wisata understand the principle of Desa Wisata and have strong awareness towards the environment of Kasongan.
2. Due to the increase in international and domestic tourists, the amount of garbage has increased of which has lead to a garbage issue and the local people are incapable of managing the garbage generated by tourists.

5-2-1. Findings I (Bantul District government)

Throughout two interviews with the Bantul District Tourism Department officials, the respondents stated that;

- The awareness of local people in Kasongan towards the environment is extremely high;
- No environmental issue exists in Kasongan what so ever
- The government provides garbage disposal services such as the supply of trash cans to dispose garbage in, and collects the garbage once in every 3 days. It is then transferred to Imogiri District to be recycled and burnt.

(Some suitable garbage is provided and distributed as feed for cattle).

- The environmental issue of biggest concern today in Bantul District overall is the garbage that is disposed by the tourists on the beach which has no relation to Kasongan or Desa Wisata.

However, it was made clear that there has been garbage issues long before the introduction of Desa Wisata in Kasongan, and that the introduction of Desa Wisata has influenced the amount of garbage being disposed by the local people. Other than the garbage issue that existed before the introduction of Desa Wisata, it can be said that Desa Wisata has not generated any further environmental issues, and that the current situation in Kasongan has been managed well by the government.

5-2-2. Findings II (Kasongan Desa Wisata villagers)

Through interviews and questionnaires to the local people in Kasongan, only 36% of the respondents answered that they consider there to be no environmental issues in Kasongan. However, unlike what the Bantul District government stated, there was;

- No existence of a garbage disposal system.
- No trash cans/ garbage disposal space provided. This led the local people to manage their garbage by themselves by disposing it by the river.

Therefore, the garbage along the river has been accumulating for many years by the local people. Although local people acknowledge that disposing garbage around the river results in negative outcomes for the environment, they claim that this is the only way to get rid of their waste since there has been no support from the government.

Despite the fact that the government does not provide any support to the villagers in terms of garbage disposal, there was once a project that provided a garbage disposal system. However, since the government collected money from the villagers to dispose of the garbage, the project was soon terminated.

However, here again, it was made clear that the introduction of Desa Wisata has not changed the amount of garbage being disposed, nor to any environmental issue in Kasongan.

Picture 3 Garbage around the river



5-2-3. Summary

This section describes the impact of the environmental aspect of Desa Wisata. The hypothesis was that local people have further paid attention to the environment after the introduction of Desa Wisata. As it is easy to see from Findings I and II, there are significant differences between what the government states, and the actual situation in Kasongan today. The local people clearly stated that it is necessary for the government to provide support that enables the local people to manage their garbage by not having to damage the environment.

Despite the fact that the garbage issue has existed before the introduction of Desa Wisata in Kasongan, neither the local people nor the government is making a move to improve the current environmental situation which could be regarded as a failure to follow the Desa Wisata principle or that there is not a high enough awareness of environmental issues. There should be more opportunities and chances for Kasongan villagers and Bantul government officials to exchange opinions and information. It is necessary that the government listen to the voices of the local people and their needs more. From these results, our findings do not support our hypothesis.

In order to reach a level of what the local people would describe Kasongan as an environmental-issue-free village, there are several recommendations we could make to improve the current situation:

- The government should provide garbage disposal systems for the villagers.
- The villagers should not dispose the garbage around the river.

Although the introduction of Desa Wisata has given very little effect on the amount of garbage being disposed, a couple of interview respondents answered that the increase in tourists has lead to garbage issues since there is no garbage bins in the village. Therefore, due to the lack of such services from the government, tourists dispose garbage in the village.

While many of the villagers still dispose their garbage around the river since there is no governmental support, there are people who are aware that the garbage issue is severe. Even though they are conscious about this situation, they cannot do anything to solve this issue without the support of the government. There must be a high priority for the government to provide services that they are saying that they are providing.

Another finding shows the correlation between economical and environmental aspects. Local people regard the decrease of Gotong Royong as an inevitable fact in order to pursue

economical benefit. However, actually the result of the decrease of Gotong Royong activity, such as the increase of garbage, could affect their economical activities. According to our interviews with tourists, it was found that tourists who visit Kasongan enjoy not only buying their products, but also the landscape of Kasongan. Deterioration of the environment could lead to a decrease in tourists and thus, a decrease of their income.

5-3. Cultural aspect

This research will now consider the implications on cultural. An interview with the village chief of Bangunjiwo Village was conducted. Kasongan is located in Bangunjiwo Village. Therefore, he is well versed in the situation of Kasongan. According to the head of the village, the change of design and pattern of ceramics due to the needs of tourists or buyers is positive if local people can gain economic benefit. Hence, he does not acknowledge the importance of their local culture. From the standpoint of local people who actually make ceramics, the research sought to clarify how local people have accepted tourism culture.

5-3-1. Findings

Making production fit demand

There are two types of ceramic products in Kasongan. The first type is the traditional or local design, which is originated mostly from Javanese culture. Examples of this are *loro blonyo*, *patung semar* and cooking devices etc. They have a long history of production. The second type is interior product such as desks and chairs, modern artistic products and statues of Buddha. After the introduction of Desa Wisata, the demand for products, which belongs to the second type increased compared to before the introduction of Desa Wisata.

In fact, craftspeople have reacted positively and have accepted the need to make products that fit to the demands of buyers and tourists. The reason why they readily accept this fact positively is that they feel making products that are adapted by the needs of buyers and tourists is their job and they need to follow the trends of the market. The amount of ceramic products and the number of people who are involved in the ceramic industry is actually increasing after the introduction of Desa Wisata. It clarifies that the introduction of Desa Wisata contributes to the succession of local culture in Kasongan.

Due to the introduction of Desa Wisata, their income reached a satisfactory level. Hence, they feel that the change in design or pattern of ceramics brings them good effects.

Picture 4 *loro blonyo*



Picture 5 A Buddha statue



Respect for traditional products

Even today, traditional products are produced if they receive orders for them. However, they tend not to produce traditional ceramics any more. They do still maintain skills that have been passed down from generations and are aware of using their original skills when they make products in order not to be imitated by other people. They are proud of using their traditional skills and ways to make ceramic products.

Pride in making ceramic products

On the whole, local people have pride in making ceramic products in Kasongan. Today, they make various series of ceramic products because they have adapted to the demand of the market. They feel that their products are desired in the market today. After the introduction of Desa Wisata, the number of tourists who visit Kasongan increased. Tourism brought them a new stimulus and is indirectly related to a rise in their motivation to make ceramic products. Almost all of the people interviewed answered that they liked to make ceramic products. One person who we interviewed said, "I am proud of making ceramic products because I can get income sufficient to cover our life."

Current challenge

Originality

As we mentioned above, ceramic products that local people make are adapted to the needs of today's market, today. Therefore, it means their ceramic products do not reflect the originality of Kasongan, and they have no central characteristic for their products. In fact, some of local people feel that they should maintain the traditional styles, such as *loro blonyo*. Because they have traditional products and skills to create them, they can maintain the traditional styles if they desire. However, they tend to pay more attention to orders by buyers, which are adapted to the trends of market and not their original products. Local crafts people seem to little desire to produce and preserve traditional products.

This issue is related to economical pressures and also due to the lack of originality caused by their incentive to increase, as well as the intervention of buyers. It was assumed that there was exploitation by mediators that would prevent an increase of income for local people. Strong dependence on mediators would result in less originality of ceramic products in Kasongan. It seems that this structure influences local people give priority only to economic aspects, especially income. One of the keys to solve this problem may be to improve access to market. More concretely better access to the internet may be a solution. When they get better access to markets, it is assumed that it would be easier to reduce dependence on mediators, leading to the production of more original products. This leads to the possibility of both increasing income and maintaining culture. Maintaining the original culture could also support sustainability in economic terms. We can regard original culture as a resource and if it is possible to establish their original culture as a brand, it could strengthen their products' competitiveness in the global markets.

5-3-2. Summary

This section explains the impact of the cultural aspect of Desa Wisata. The hypothesis was that local people would accept the change of culture after the introduction of Desa Wisata. According to the research, the local people did accept a change in their culture. The introduction of Desa Wisata brought them in increase in income and the number of goods produced. These outcomes increased their motivation to make ceramic products surely and it is related to taking pride in the production of their ceramic products. Local people are satisfied

with the introduction of Desa Wisata due to the increase of income and amount of production. This finding supports the hypothesis.

Under the present conditions, they have no strong incentives to maintain their traditional culture because they rely on copied culture and demand by buyers or tourists even today. However, local people who live in Kasongan are not aware of the concept of copied culture. It is proposed that if further development is to take place they have to consider maintaining their original ceramic products. This will be related to the future growth for Kasongan Desa Wisata. In fact, true still exists and therefore, they should have confidence and take pride in the production of their traditional ceramic products. To emphasize the originality of their ceramic products will increase the value of their products through creating a popular brand of products that only exists in Kasongan.

5-4. Social aspect

This section focuses on the social impact which is caused by the introduction of Desa Wisata. Two findings about the relationship among crafts people and Gotong Royong are made through interviews and questionnaires.

5-4-1. Findings

Relationship among crafts people

Through interviews with crafts people, it was found that they do not consult with others when they have problems. The crafts people said they solve problems by themselves or talk with their friends. It seemed that crafts people do not communicate with each other and do not have opportunities to talk about any problems. Therefore, there are weak relationships among their professional networks.

Gotong Royong

Gotong Royong has two meanings; one is a spirit of helping others and the other is volunteer activities. People cooperate and take part in volunteer activities, such as road repairs.

Interviews were held with the former head of the village, who served from 1962 to 2002, and a crafts person. In this interview they explained about the change of “Gotong

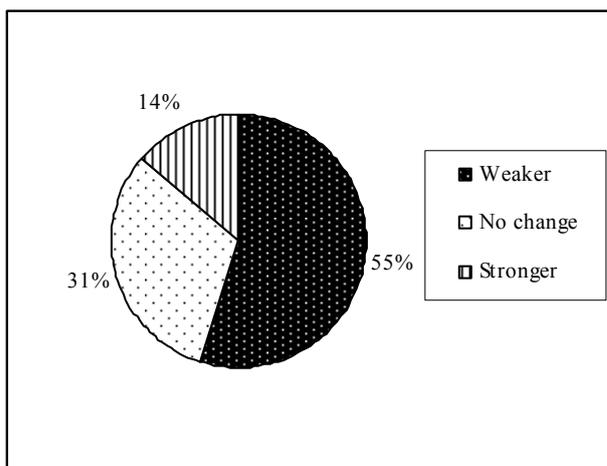
Royong” after the introduction of Desa Wisata. It was thought that Gotong Royong was the standard for establishing a sense of local cohesion because there were many people exhibiting a strong spirit of helping each other and participating in volunteer work, examples of local cohesion.

The findings from these interviews are expressed in below Table 4. Questionnaires were also distributed and revealed that 97% of the people who answered said there was Gotong Royong in Kasongan. However, 55 % of people thought that Gotong Royong became weaker after the introduction of Desa Wisata, while 31 % thought it had not changed. An additional 14 % of people answered it become stronger after introduction of Desa Wisata (See Figure 9). All of the people who answered the questionnaire said they wanted to help each other when they were dealing with economic hard times.

Table 4: Result of interviewing with two people

	Former head of Kasongan	A crafts person
Change of Gotong Royong	Spirit of “Gotong Royong” declined after introduction of Desa Wisata.	The frequency and participants of “Gotong Royong” decreased after introduction of Desa Wisata.
Before the introduction of Desa Wisata	Most of people built a house freely before introduction of Desa Wisata. One of story referred to the cooperation and construction of a bridge in 83 days.	People had to do a lot of things, for example fixing and cleaning a road and painting. Lack of budget
After the introduction of Desa Wisata	People hire builders to construct their houses. People knew the principle of “time is money.”	Society is less responsible for many things. Everything is done by the government. For example, the government repairs the roads and infrastructure that used to be repaired by local people.
Reason of change		Level of economy is increasing. People became busier with their business due to economic growth.
The rest	In 2006, there was pretty strong earthquake. Gotong Royong came reappeared after the earthquake. People shared money and food at that time.	People try to make opportunities to cooperate on the weekend but they cannot join because tourists come to Kasongan and they are busy with work.

Figure 9: How Gotong Royong changed after the introduction of Desa Wisata



Author (2010)

According to interviews with the two people, one of the reasons of decrease of Gotong Royong spirit was related to economic activity. Some could not afford to consider about cultural aspects when they concentrated on pursuit of economic growth. Whether a person will increase their work time when he or she is in a better economic condition, (such as better income per time), depends on each person's preference. Those who like their private time will reduce their work time in that situation. On the other hand, those who have a stronger incentive to work will work more. However, according to the result of our questionnaire survey, it seems that the Kasongan people have tended to work more even when their economic situation gets better. It means a decrease of their volunteer time and therefore, it seems that Gotong Royong spirit is inversely proportional to economic growth.

As mentioned above, Gotong Royong also means volunteer activities. One regular activity of Gotong Royong, for the people of Kasongan was gathering and talking about environment issues and even promoting regular cleaning activities. These actual activities are based on the Gotong Royong (helping others) spirit. Thus, the decrease of this Gotong Royong spirit can directly and negatively affect the environment of Kasongan.

5-4-2. Summary

This section describes the impact on the social aspects resulting from Desa Wisata. The hypothesis is that the introduction of Desa Wisata improved local cohesion. According to the findings, however, they do not support the hypothesis. Desa Wisata did not improve local cohesion an in fact, it has gradually weakened after the introduction of the Tourism Village

concept. Because crafts people do not appear to communicate with other crafters very much, it was determined that the relationship among people in Kasongan seemed to be weak. Although some people said the atmosphere in Kasongan improved as a result of an improved economy after the introduction of Desa Wisata, opportunities for cooperation among local people decreased gradually. However, most people thought it to be an inevitable result of increased economic benefit.

6. Conclusions

The assumption before conducting field research was that Kasongan Desa Wisata should have the potential for sustainability from the five aspects of administration, economy, environment, culture and society. However, the results of this research indicate that Kasongan Desa Wista is not sustainable tourism because of following reasons:

First, POK DARWIS, as the administrative organization of Kasongan Desa Wisata, is not a true CBO as is claimed to be in the policy of the Bantul government. All staff members of POK DARWIS are civil servants and local business leaders. Local people were not involved in the introduction process of Desa Wisata, nor are they involved in the management system of POK DARWIS. In addition, POK DARWIS does not work multi-functionally. Due to the shortage of financial support from the central government to Kasongan Desa Wisata for tourism promotion, the administrative organization of Kasongan Desa Wisata is engaging mainly economic activities such as seeking investors, and guiding guests from the government in order to gain financial benefits only for the promotion of the ceramic industry but not for tourism promotion.

Second, sustainability in regards to the environment and social aspects was found to be negative. Regarding environmental sustainability, neither the local people nor the government was making a move to improve the current situation. As for the social aspects, the social cohesion has gradually weakened in the local community. However, other findings regarding economical and cultural aspects are positive. As for the economic aspect, the income of the local people is increasing as along with the number of tourists and buyers. In regards to the cultural aspects, they accept that their culture is changing. As a result, the aspects affected by the introduction of Kasongan Desa Wisata have not worked for enhancing sustainability in the case of the Kasongan local community.

There are no specific connections between the administration aspect and economical,

cultural, social and environmental aspects in terms of the local people's initiative. Local people in Kasongan have not been involved in the introduction process nor the management system. Prof. Janianton Damnik in the Center of Tourism Studies, Gadjah Mada University, stated that "Desa Wisata is a political instrument," meaning that the concept of KDW was not originated from the perspective of the local people, but rather completely from the side of the government. In the early stage of the introduction process of Desa Wisata, the Bantul government intended to promote Kasongan only by giving it the name Desa Wisata. More recently, the Bantul government established a CBO to get more funding from the central government in order to maintain local infrastructure. In other words, the opportunities for local people to participate in the decision making process were not found through the introduction process of Kasongan Desa Wisata and even now, POK DARWIS is excluding local people.

7. Acknowledgements

This research was conducted from September 18th to October 2nd 2010 under the Overseas Field Work (OFW) program in Nagoya University. With 6 members in the group, Working Group 4—Tourism and Culture group—could not have been able to conduct this research without the generosity, helpfulness, and kindness of respective professors, colleagues, and translators of Nagoya University and Gadjah Mada University.

Without the cooperation of Professor Nanang and Professor Suharto from Gadjah Mada University, we would not have been able to know the existence of Tourism Village (Desa Wisata) in the first place, in addition to further information about the tourism industry in Indonesia. Under the admirable management of these respective professors, the 2 weeks we spent in Yogyakarta concluded with fruitful outcomes.

We must not forget the three brilliant translators and coordinators, Mr. Muhammad Rum, Miss Dian Fatmawati, and Mr. Faris Alfadh from Gadjah Mada University. We can say with great confidence that this research was impossible to conduct without the effort of these three translators. In addition to their usual work, thanks to their relentless work for the entire 2 weeks from morning to night with us, every single document, interview and questionnaire was translated. Moreover, their quick action in dynamic situations was highly admirable.

Professor Takahashi, our supervisor, was also very helpful by providing us with appropriate suggestions and advice by observing our group work from a distance. Professor Takahashi's guidance was always supportive from the very beginning of the OFW group work.

Also, his support towards presentations and this Final Report was exceptional.

Last but not least, we must not forget to appreciate the continuous work by Professor Shimada and Professor Penghuy for making this OFW program successful. Despite facing unexpected situations, both professors guided us with appropriate directions, and were always there to provide everyone with kind words concerning individual physical and mental health.

Finally, we would like to thank officials from Yogyakarta Government, Bantul Government, Bangunjiwo Government, and the villagers and Village chief of Kasongan Village, for kindly welcoming us by providing us with their valuable time and extremely helpful and significant information.

Once again, we would like to take this opportunity to show our gratitude to all the people who have supported us and who have contributed to this research, making it a successful study. We are sure that this relationship of Nagoya University and Gadjra Mada University will continue, and that further cooperation will always be possible.

8. Appendices

The questionnaire for Kasongan people

Please tell me your basic information;

- Name _____
- Age _____ Gender ___ male ___ female
- Occupation _____
- Family members _____
- For how many generations have you lived in Kasongan? _____
- For how many years have you lived in Kasongan? _____
- Is your occupation related to Desa Wisata? Yes No

To those whose occupation **is** related to Desa Wisata;

- Which part of Kasongan do you work at? _____
- What was your occupation before the introduction of Desa Wisata? _____
- For how many years (generations) have you worked in Desa Wisata industry?

To those whose occupation is **not** related to Desa Wisata;

- Which part of Kasongan do you work in? _____
- Are you a member of “POK DARWIS”? Yes No

To those who are not a member of “POK DARWIS”;

- Do you know what “POK DARWIS”? Yes No

Please circle either “**yes**” or “**no**”, and also the reason why you think so;

Q1. Do you know Kasongan village is a Desa Wisata?

Yes

No

Q2. Do you think the number of tourists has increased due to the introduction of Desa Wisata?

Yes

No

Reason

Q3. Do you accept tourists to visit sites that show the process of the production of ceramic goods or the kiln?

Yes

No

Reason

Q4-1.

If you have lived in Kasongan since before the introduction of Desa Wisata (1995),
What was your income before the introduction of Desa Wisata (_____)?

- | | |
|---|--|
| <input type="checkbox"/> under 2,000,000Rp. | <input type="checkbox"/> 2,000,000 Rp.—5,000,000 Rp. |
| <input type="checkbox"/> 5,000,000 Rp.—8,000,000 Rp. | <input type="checkbox"/> 8,000,000 Rp.—11,000,000Rp. |
| <input type="checkbox"/> 11,000,000Rp.—14,000,000 Rp. | <input type="checkbox"/> 14,000,000Rp.—17,000,000Rp. |
| <input type="checkbox"/> 17,000,000Rp. and above | |

Q4-2.

What is your current income?

- | | |
|---|--|
| <input type="checkbox"/> under 2,000,000Rp. | <input type="checkbox"/> 2,000,000 Rp.—5,000,000 Rp. |
| <input type="checkbox"/> 5,000,000 Rp.—8,000,000 Rp. | <input type="checkbox"/> 8,000,000 Rp.—11,000,000Rp. |
| <input type="checkbox"/> 11,000,000Rp.—14,000,000 Rp. | <input type="checkbox"/> 14,000,000Rp.—17,000,000Rp. |
| <input type="checkbox"/> 17,000,000Rp. and above | |

Q5. If you have lived in Kasongan since before the introduction of Desa Wisata (1995), how have the following costs you incur changed from 1995 to present (after the introduction of Desa Wisata)? Please circle the appropriate number.

Increased drastically-5, Increased-4, No change-3, decreased-2, Decreased drastically-1

- Clothes 5 4 3 2 1
 - Light, Fuel, and Water expenses 5 4 3 2 1
 - Rent 5 4 3 2 1
 - Food 5 4 3 2 1
 - Education costs (general education) 5 4 3 2 1
 - Medical costs 5 4 3 2 1
 - Transportation costs (eg. Fuel, bus and taxi fee, etc.)
5 4 3 2 1
 - Luxuries (eg. Cigarette, traveling, theatre)
5 4 3 2 1
- If one runs a store;
- Rent (store) 5 4 3 2 1
 - Tax 5 4 3 2 1
 - Savings 5 4 3 2 1

Q6. If you have lived in Kasongan since before the introduction of Desa Wisata (1995), do you feel that the prices of commodities have changed before and after the introduction of Tourism Village (from 1995 to present)? (Please circle either “yes” or “no”.) Please tell us the specific price if possible;

- | | Increased or not? | | Before | After |
|--------|-------------------|----|-----------|-----------|
| | Yes | No | _____ Rp. | _____ Rps |
| ● Rice | | | | |

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