

Settlement and Housing Post Earthquake in Yogyakarta, 2006.

A Heritage Housing Program of Kotagede, Yogyakarta Indonesia

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1 Shelter Situation Analysis

1.1 Basic General Data



Indonesia (Southeast Asia, archipelago between the Indian Ocean and the Pacific Ocean, geographic coordinate: 5⁰ S, 120⁰ E,

Total Area: 1,919,440 km²

land: 1,826,440 km²

water: 93,000 km²

Land boundaries: *total:* 2,830 km; *border countries:* Timor-Leste 228 km, Malaysia 1,782 km, Papua New Guinea 820 km

Climate: tropical; hot, humid; more moderate in highlands

Natural Hazards: occasional floods, severe droughts, tsunamis, earthquakes, volcanoes, forest fires

Population: 234,693,997 (July 2007 est.): birth rate: 19.65 births/1,000 population (2007 est.) death rate: 6.25 deaths/1,000 population (2007 est.)



Fact About Yogyakarta

Yogyakarta Province is one out of 30 province of Indonesia - located in south-central of one main island of Java with area: 3,185.80 km².

Basic Data of Yogyakarta: (7°47'S, 110°22'E)

Population 3,121,000 (2003)

Density: 979.7 person/ km²

It is surrounded by the province of Central Java (Jawa Tengah) and the Indian Ocean in the south. Yogyakarta has the second-smallest area of all the provinces in Indonesia, after the Jakarta Capital Region. However it has, along with adjacent areas in Central Java, some of the highest population densities of Java Island.

1.2 Shelter Related Fact and Figures

Earthquake

At 05:53 on May 27th, 2006 an earthquake measuring 5.9 on the Richter scale struck Indonesia's central island of Java. The epicentre was located approximately 37 kilometres south of city Yogyakarta. The earthquake affected five districts within Yogyakarta province and six districts within neighbouring Central Java Province, together home to 6.9 millions people, severely damaging infrastructure, housing, school and clinics. The two worst affected districts were Bantul in Yogyakarta and Klaten in Central Java. 5,744 people were killed immediately with more than 45 injured. Over 350,000 houses were damaged beyond repair and 278,000 suffered lesser damaged, directly affecting 2.7 millions people and rendering 1.5 millions of them homeless, three times the number in Aceh after the tsunami December 26th, 2004. (BAKORNAS: National Forward Coordinating Centre, at Yogyakarta Airport as 22 June 2006)

In the municipality of Yogyakarta Kotagede had been the worst area affected by this disaster. Located around 10 kilometers at the southeastern part of Yogyakarta city center, the area is now well known as the center of silver handicrafts in Yogyakarta¹.

Keeping around 170 old buildings built in 1700 to 1930 as a heritage area in Yogyakarta, Kotagede has a number of Javanese traditional house namely Joglo and Kalang houses. Kalang are people invited by the King to become carvers of court jewelries. The uniqueness of Kalang House is the unification of Javanese and European elements, as the main building that is located at the back part and European model for the front part. The joglo building, especially the hall is not open like joglo of Javanese house anymore; it is modified as being closed. The reconstruction in this place really needs special attention such of global and comprehensif approach that can be through step by step. The construction of this area must also keep the historical cultural environment.

¹Taken from www.yogyes.com/en/yogyakarta-tourism-object/places-of-interest/kotagede/

Below is the table of house damage in Kotagede as per 31 December 2007



Classification	Number	Covered	Non Covered
Heavy Damaged	25	2	23
Medium Damaged	150	6	144
Lightly damaged	225	-	225
Total	400	8	392

In general, these regions are mainly populated by poor labour, non landed farmers and various cottage industries. It is these poor that have been most severely affected by this disaster. Both farmers and non-farmers have their livelihood damaged. Farmers have lost irrigation channels, other water sources and storage areas for their seeds and harvests. Craftspeople and those in food production have lost their shelter/homes which in most cases, is also where they worked. The assets of many self-employed persons, micro enterprises, craft-people, farmers and vendors have been severely affected as well. Their recovery needs are not well reflected in most appeals as their assets were never registered and their businesses were home based. Temporary shelters for the most part do not provide the space for many of them to rebuild their cottages industries such as making tahu and tempe. Comprehensive

cross sector programs to replace their work areas as well as their settlement are required.

Access to Shelter

Basically in general in Indonesia, labour and construction markets work well. House prices are relative to incomes, housing finance and land markets are imperfect. The following priorities in housing finance and land for policy action by the Government would expand housing delivery for moderate and low income groups.

Banks, post-crisis (1997 – 1998), face a number of severe constraints that make them unwilling to expand mortgage lending. The Capital Adequacy Ratio (CAR) position of many banks is weak and mortgages have a high risk weighting (100 percent), credit risk in mortgage lending is high because of lack of credit information, titling and loan recovery problems, and there is a lack of access to medium and long-term funding options. Banks pay a premium to attract short-term deposits by long-term investors and rather invest in risk free, relatively liquid high yield government paper than making long-term mortgage loans. Alternative sources of housing finance for low-income households are limited. Micro-finance is fairly accessible in urban areas, but savings and credit products are not suitable for housing credit and many micro-finance institutions lack technical skills and are operated on a non-commercial basis. Medium term funding is not available, and regulation of the non-bank micro-finance sector is weak.

Housing finance is expensive because of macro-economic conditions and inefficiencies in industry. Unsecured lending for housing by MFIs is costly and MFIs are funding-constrained. Land and infrastructure markets for low-income housing do not work well. Current finance-linked subsidies are unsustainable, inefficient and market distorting. Rental housing for low-income workers is mostly available in the informal sector only.

Current public rental programs require extremely high (and mostly hidden) subsidies, are poorly managed and serve a higher-than-intended income group. Capacity at the local government level to address low and moderate housing problems is extremely limited.

Earthquake's survivors

Most of earthquake survivors especially those who have heavily damaged house or destroyed, were targeted as the beneficiary of government and NGO programs and have received an omnibus program of help initiatives for their houses as below:

- a. Transition or temporary Shelter: A roof structure from bamboo or other simple and sustainable materials, tarpaulins etc.
- b. Semi permanent house: A construction of half permanent mix material from cement, sand and timber.
- c. First house or Core house: A single room house, size 21m², permanent.
- d. Building materials: Cement, sand, timber etc.

1.3 Housing Policy

Two weeks after the earthquake, government declared that it will subsidize the physical reconstruction and rehabilitation of the housing program:

1. Earthquake victims who have their house totally damaged will be given fifteen millions Indonesia Rupiah which equal with US \$ 1,630.00
2. Those survivors who have slightly damaged houses will be entitled to have five hundred thousand Indonesia rupiah equal to US \$ 55.00

The amount mentioned in number one above will be given in three stages, with disbursement mechanism, as required. The fund's disbursement was setup in three stages with an interval of 3 months to give the people time to use the fund to construct their houses. Each stage was disbursed for the different purpose of construction. IDR 5 millions for foundation, IDR 5 millions for frame and roof component in third stage.

This government fund had targeted for approximately 220,000 houses in Yogyakarta and 96,000 houses in Central Java province and some small number outside these areas.

Given the fact that this policy is having two classifications only and have not covered those houses who are in category medium damaged, people in this category then destroyed their houses so they can be eligible to get this fund. Accompanying this situation is the fact that the government have increased the demand of fund for heavily damaged houses. Thus, it has the impact that there is a

need to re register and have taken more time. Government was not ready to address this situation. The process of disbursements was delayed for six months. Similiary, the communities also were in a difficult situation. A lot of them have used most of the reconstruction funds from the government that were already distributed for livelihood/income generating type of activity. Another is that the big demand for building materials, the requirement for technical skills assistance to finish their house reconstruction towards reaching at least a normal dwelling, and unstable price and availability of materials and skills man².

1.4 Actors in Shelter Delivery and their Roles

1. Government of Yogyakarta and Municipality

The government of Yogyakarta and the municipality are the main stakeholders in these reconstruction programs. In national level, government had decided to establish TTN (National Technical Assistance) as central government representative with main task to coordinate and assist the government of both provinces and other actors. Registering and validating the number of survivors, assess the needs situation and also facilitate the aids program. The Yogyakarta province and municipality of Yogyakarta were been acting as coordinator and facilitator for the NGO after UN Agencies leaving and also to monitor and evaluate ongoing program.

2. UPP – World Bank

The Community-based Settlements Rehabilitation and Reconstruction Program builds on an existing World Bank-supported Urban Poverty Program (UPP) in Yogya and Klaten which received an emergency reallocation of housing funds immediately after the May 27th, 2006, earthquake. Those funds were used to build over 6,480 houses, 1,500 of which have been completed and the others are nearing completion.

3. JRF. (Java Reconstruction Fund).

The Java Reconstruction Fund (JRF) recently launched an ambitious project to reconstruct 21,500 permanent homes and 24,500 transitional shelters in earthquake affected Yogyakarta and Central Java, as well as the tsunami

² Mobile Community Assistance

ravaged coast of Pangandaran, West Java. Out of the initial pledge of US\$76 million received by the JRF, US\$66 million has now been allocated to housing. The JRF was set up soon after the earthquake at the request of the Government of Indonesia and brings together six donors (EU, Netherlands, UK, Canada, Finland and Denmark) to help victims primarily to rebuild their homes and regain their livelihoods. The Fund is administered by the World Bank.³

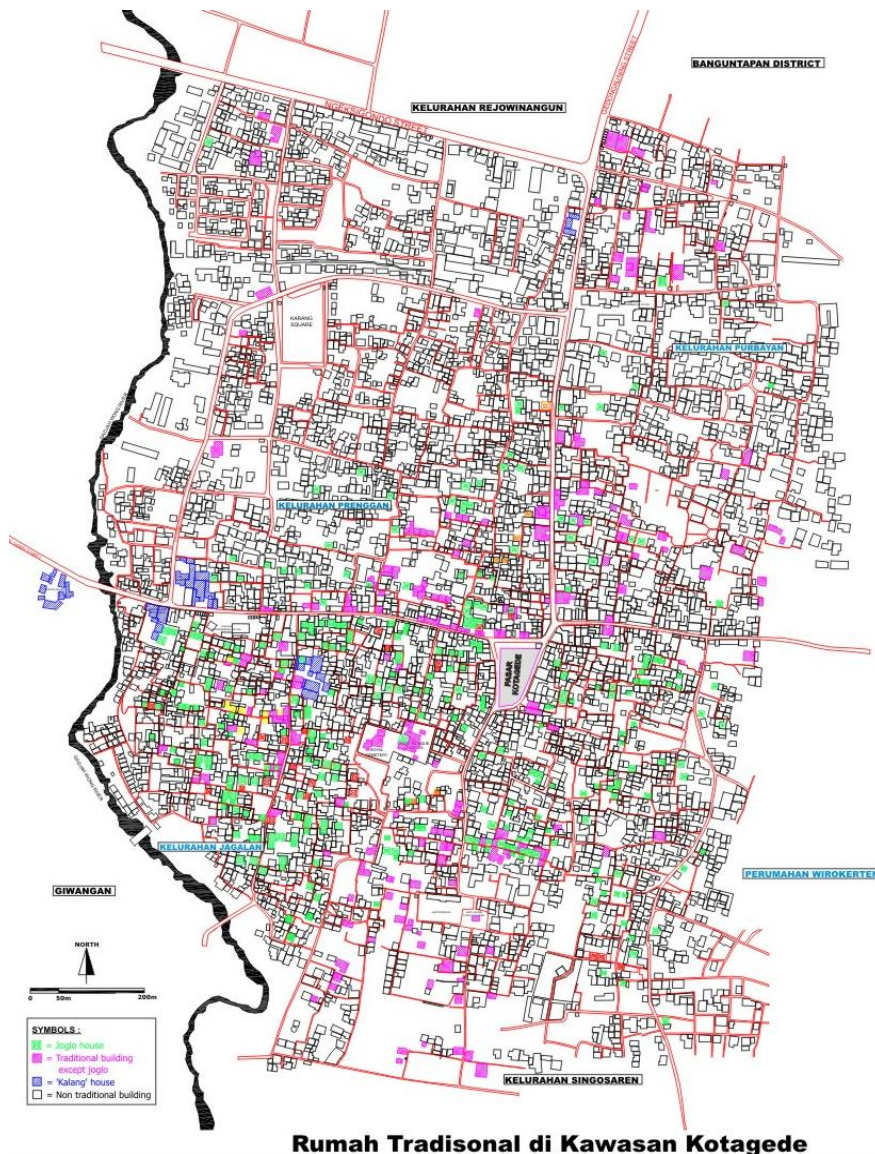
4. NGOs and other donor country:

In the beginning of response of this disaster, a lot of NGOs, national and international had been working in these areas. Most of them were been working in Aceh in the tsunami operation since 2004. Some of them are working in the housing and settlement program, like Catholic Relief Service (CRS), Habitat for Humanity, Jesuit Refugee Service (JRS), International Organization for Migrant (IOM), Community Habitat Fund (CHF) and Community Base Assistance Program (CBAP- AUSAID) and UNDP

1.5 Shelter Design

In the post disaster situation shelter design require a consolidated few crucial point and time condition; for instance in the emergency situation shelter design has to anticipate with an integrated approach in its targeted communities by incorporating water and sanitation and other services as part of the temporary shelter initiative. While in this current situation of Kotagede - Yogyakarta is in the development situation which must take into account of community engagement, socio economic, heritage, land issue and financial.

³ World Bank Indonesia, Jakarta 20 December 2006.



2 Organisation

CBAP (Community Base Assistance Program) is an Australian government initiative to respond to earthquake disaster situations in Yogyakarta and Central Java in May 27th, 2006.⁴ The goal of the CBAP is to assist the affected families and communities to return as quickly as possible to normality in the three areas of life most severely affected by the earthquake⁵.

- household life
- income-producing activities

⁴ <http://aip.jaty.info/>

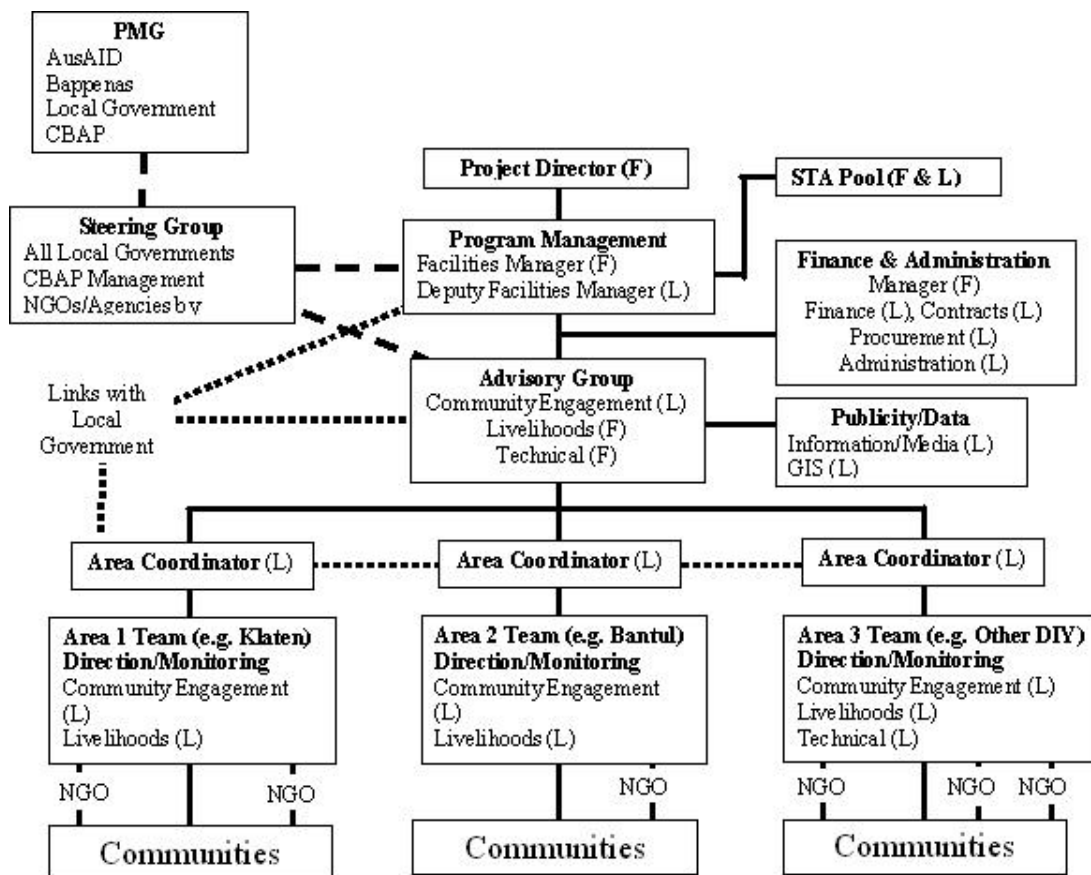
⁵ CBAP: Program Summary and Strategy

- schooling

As the Deputy Program Manager in this organisation, my role is to assist the Program Manager (PM) in the design of the overall program of CBAP.

The related program of construction is called MCA (Mobile Community Assistance) which is the core of this housing program.

In the meantime CBAP will have extension for the next two years (up to 2010). The AUSAID scoping study has been done in mid February 2008 and have some recommendation for possible future programs, while internally CBAP has been discussed to submit and suggested the program structure below:



3 Shelter Problem

There are problems which people encounter in shelter related issue, such as:

1. The government funds about IDR 15 millions / HH (US \$ 1,630)⁶ is not proper enough to build the smallest minimum size -earthquake resistant house. (The cost is about IDR 27 millions for 21m²) in both province affected, Yogyakarta and Central Java.
2. Lands for those who have been living in Sultan Ground areas in Yogyakarta municipality.
3. Those heritage house that were slightly damaged in sub district of Kotagede Yogyakarta, as government will have no different treatment and support about IDR 500,000 (US \$ 54).
4. Fact that some NGOs have been working in providing permanent (earthquake resistant) houses in small numbers. However the construction cost has not been affordable by the villagers.
5. Approximate 1,000 new handicapped persons needed special house other than the normal house with government support.

4 Proposal for Change and Improvement

Target beneficiary:

Location : Kecamatan Kotagede, Municipality of Yogyakarta.

Number of beneficiary: 225 household – 564 persons.

Gender : 228 female and 336 male

The specific objective of the next program is to optimize the funds available to support as many as of the survivors as possible by giving a small amount of fund for the community in Kotagede to rebuild slightly damaged houses through culturally appropriate construction. Beneficiaries of the program are those 225 household of Kecamatan Kotagede who have heritage house namely JOGLO.

The objective will be achieved by developing technical assistance for construction as follows:

- Encouraging the communities to reshape the common understanding on the methodologies of constructions works by an extensive training in

⁶ US \$ 1 = IDR 9,200

constructions skills, which is expected to become the driving forces to change peoples attitude towards building practice in housing construction. (Short term).

- Creating opportunities for mitigation by raising public awareness and share a common interest in reducing future loss of life, injury and property damage amongst the community. (long term).

Actors of the Program

- MCA Department of Construction CBAP:

This program will be running under coordination and supervision by the Construction and MCA Manager / Construction adviser as counterpart.

- NGO - Implement Agency

A specific requirement has to be implanted for the implement agency such as good knowledge of heritage dwelling of Kotagede with the construction management background as required by the construction partner.

- Government of Municipality of Yogyakarta.

The government of Yogyakarta through the provincial office of Cultural and tourism will be the main government representative as key actor with the municipality of Yogyakarta and the authority of Kecamatan Kotagede.

- Community.

The Community itself as the subject and beneficiary of the program will also be involved in the program in active community engagement approach.

4.1. SWOT Profile

Strengths	Weaknesses
<ol style="list-style-type: none"> 1. CBAP in general, Capacity and ability in term of finance. 2. Housing Heritage Program 	<ol style="list-style-type: none"> 1. Experiences on earthquake resistant houses and school construction. 2. Lack of Knowledge on Heritage houses.

Opportunities	Threats
1. MCA team as part of Construction 3. Non Construction Department. 4. Community Engagement / Approach	1. Liability issue. 2. Community conflict horizontal.

Strengths

CBAP: Community Base Assistance Provider is the organization of Australia Indonesia Partnership with amount Aus \$ 30 with duration in two years for response to the earthquake disaster in Yogyakarta and Central java. We are now in phase second 6 MRP heading for third phase. The First and Second 6 MRP and the initial phase for first three months have been giving the experience and reaching some good program in construction, livelihood schemes.

Currently the program has decided to extend the present up to mid 2010. Heritage of Kotagede has been arisen by the municipality of Yogyakarta. Housing Heritage Program is the cultural approach as part of the concern of the program for community in Yogyakarta. The program itself will give more space for YCAP to the community of Yogyakarta since the Heritage Houses is part of the general livelihood of Yogyakarta as tourist destination. Running the program will also create opportunity for YCAP and the government of Australia as neighbour and good friend of People in Yogyakarta. The program will also assist the community to stand up as they fell down from the earthquake. Through additional fund for max five millions, the community then can finalize the reconstruction and rehabilitation of the house.

Weaknesses

Experiences on earthquake resistant houses and school construction on the other hand also has been a weakness. There is the basic different ways of construction between the earthquake resistant construction and heritage dwelling. However, this can be avoided by implementing good coordination and collaboration with the government and community. While the lack of knowledge on Heritage houses also can be decrease by hiring a short term heritage consultant from Heritage organization in Yogyakarta.

Opportunities

MCA Department of construction has been running the successful trainings to show the construction ways of earthquake resistant building. The MCA experiences would be the resource-able to run this program. Other than that, the Finance and Procurement department was also huge experience in supporting the work of Construction department and especially with the MCA which have been undertaking one stop logistic support for materials. This department have also done good relation and building the good network with resources such of the suppliers.

Inner Community Engagement within construction team has shown the good communication and approach to the community. The involment of the community in every step of construction has given extra confidence within the team to running the program.

Threats

Liability issues on additional/repairing the construction of dwelling have been discussed in the preparation of MCA program. However, the liability issue can be reduced and avoided by involving the authority and community in the program. By involving the authority within government in the provincial level, Municipality and Kecamatan level and the community itself will encourage the sharing of responsibility of the program. In the future, the community and the authority will have full responsible of the program such of maintenance and possible additional construction. Community conflict horizontal have to be aware of the program since the program will take priorities of certain number of beneficiaries. However, this can be avoided by the close community engagement as early as possible from the assessment of beneficiaries.

4.2. Strategy

1. The project is justified by the need for additional funding of reconstruction that will guide the people to accomplish rebuilding their houses for living and in general to restore their livelihoods. Kotagede was the most directly affected by the earthquake and further threatened by the government's

response program that would deprive them of their traditional house by the construction of standard permanent earthquake resistant houses. While people have shown the will, energy and enterprise to rebuild and to contribute to tourism in Yogyakarta, they cannot be expected do so without additional substantial material and technical assistance.

2. Self help mechanisms will be implanted to this project since the community know well on their specific houses. The program provides materials using legal resources as community request along with the technical assistance on how to deal with the authority. This specific technical assistance has to be taken into consideration because in some cases, the authority was not easy to deal with. The Heritage house of Kotagede belongs to the community but also becomes of a culture property. The community has to take the lead and have support from the programs in MCA and community engagement department.
3. The program needs to carry out one month preparation for in depth interview to detail the needs of material and to have 225 beneficiaries. This in-depth interview will come up with:
 - List of beneficiaries.
 - List of material as community needed

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