



REPUBLIC OF INDONESIA

INDONESIA NATIONAL REPORT FOR HABITAT III PREPARATION

September 2014

Prepared by the Habitat National Report Working Group

Supported by:



Ministry of Public Works
Republic of Indonesia

HABITAT
Indonesia



Sekretariat
Nasional

FOREWORD

Indonesia has been actively participating in the United Nations activities in housing and settlements development since the First Habitat Conference on Settlements in Vancouver in 1976 and the Second Habitat Conference in Istanbul in 1996. Accordingly, Indonesia has committed to implement the Vancouver Declaration, the Declaration of Istanbul and Habitat II Agenda.



Indeed, Indonesia will perform as the leader in Asia Pacific Region in preparing Habitat III Conference which will be conducted in 2016. Indonesia appreciates the support of United Nations Habitat, especially to the United Nations Habitat Executive Director (Dr. Joan Clos) who visited Indonesia last June 2014 and signed the Memorandum of Understanding with the Ministry of Public Works, Republic of Indonesia. Following that Memorandum of Understanding, Indonesia will conduct the Asia Pacific Regional Preparatory Meeting for Habitat III in May 2015 in Jakarta.

Towards Habitat III Conference, Indonesia has prepared a draft of the Indonesian National Report by involving all stakeholders from government, academia, practitioners and observers. This report will be submitted to the United Nations Habitat during the first meeting of the Preparatory Committee in New York on September 17 - 18, 2014.

Considering the guidelines from the United Nations Habitat, the Indonesian National Report consist of six sub-themes, namely: (1) Urban Demographics, (2) Land and Urban Planning, (3) Environment and Urbanization, (4) Governance and Institutional, (5) Urban Economics, and (6) Housing and Basic Services. Besides describing achievement of Indonesia in these six sub-themes, the Indonesian National Report also identifies challenges and future agenda in sustainable settlements and urban development.

Hopefully, this report can contribute to sustainable settlements and urban development in the national and regional contexts.

Jakarta, 8 September 2014

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I. Introduction

1.1 Background

The government of Indonesia has actively participated in the UN conferences on settlements since it was first convened in Vancouver in 1976. The conference, known as Habitat I, was conceived as an effort to build awareness of country members on the importance of human habitat and humanity as the core livelihood of the future society. It has become an inspiration for policies in housing and settlement development in Indonesia. Habitat I Conference in Vancouver, believed to be in response to the Stockholm environmental declaration in 1972, which emphasizes the importance of maintaining harmonious relationship between men and the environment. Furthermore, the Habitat II Conference held in Istanbul assumed as a follow-up to the UN Conference on Environment and Development in Brazil by 1992, and Habitat Agenda 1996 can be considered as an elaboration of Agenda 21 as stipulated in Brazil. By 2016, there will be a Habitat III Conference.

Approaching the conference on Habitat III in 2016, each UN country member has to prepare the national report about their achievement of the Habitat II agenda, which will then be used as inputs for formulating the next agenda of Habitat III. This national report consists of implementation of the Habitat II agenda, issues and challenges faced by each member country, and thoughts that contribute towards the future agenda.

UN Habitat provides a guideline and format for the writing of the national reports that comprise six topics, thirty issues and twelve indicators. The sixth topics are about issues, challenges and agenda for the future agenda, which are: (1) Urban Demographic; (2) Land and Urban Planning, (3) Environment and Urbanization; (4) Urban Governance and Legislation; (5) Urban Economy, and (6) Housing and Basic Services. The National report, thus, would not reflect the commitment from the head of the Nations, as was presented as the documents from Habitat II agenda. This new format is seen as the elaboration and the reformulation of the commitment of Habitat II agenda, specifically on adequate shelter for all and sustainable human settlement. The shift from the field of housing and settlement toward urbanization is in line with the transformation at the world scale that was discussed in the World Urban Forum 2014. The world has become more urbanized, generated its own problems and challenges for the future existence of the human settlement. UN Habitat views that the main concern of human settlement for the next two decades is connected to urbanization.

1.2 Adoption of Habitat II Agenda in the Indonesian Development Plans

The government of Indonesia views that the Habitat II agenda in 1996 has been adopted and included in the development policies and strategies, which at the time was implemented through the sixth term of Five Year Development Plans (*Repelita VI*) and was about to be included in the formulation of the Seventh term of Five Year Development Plan (*Repelita VII*). In the seventh-term of Five Year Development Plan (*Repelita VII*) effort to

specifically addressed the integration of the The Habitat II Agenda 21 into the development plans was initiated. Reform of 1998 in Indonesia abruptly changed the course of *Repelita*. The National Constitution was amended and the Development Plans was restructured. The position and integration of the Habitat II Agenda was reformulated but not yet fully integrated into the new development plans. As the priorities on development policies and strategies, a comprehensive overview has not been executed as there are many policies that are adhoc and incremental in nature.

1.3 The Amendment of the Constitution

The mandatory institution that reformulated the constitutions has worked for two years, from 1999 to 2001, which resulted in the amended constitution being ratified in 2001 as the new national commitment toward national governance. The essence of the amendment is that to : a) state that the Republic of Indonesia is conducted by rule of law; b) strengthen and expand decentralization in the execution of the national governance, and; c) transform the fabric of nation-building toward democracy and that respect the human rights.

Referring to the amended constitution, the Indonesian society has to advance on the issues and challenges on laws in order to reflect new values, and orientation towards democracy, decentralization, human rights, diversity, pressure from globalization and other incremental changes that took place for the last six years.

1.4 Advancement on Laws

To instigate the nation toward abiding to the rule of law, there are many new regulations installed in order to advance the amended constitution towards its implementation. Newly installed laws, and renewed laws were enacted in order to replace *ad-hoc*, reactive policies introduced during the vacuum periods. Laws enacted after the reform of 1998 that influence and reshape the governance of urbanization and their implementations, among others are:

Laws on Local Governance. laws on local governance are the laws that have been replaced most often. This indicates that the Government of Indonesia continues to search for the appropriate organizing administrative system of local governance that is suitable for local geographical, demographic and social dimensions. Since the promulgation of the Indonesia nation in 1945, local governance in Indonesia has been regulated through ad-hoc policies. The first law on local government was ratified in 1948. Since then, in 1957, 1965, and 1974 are the years to which new laws were introduced to replace the old ones, especially designed to support the socio political systems that were installed in those periods. Between 1974 to 1999, the same law that supported centralization of the governance is the longest executed in the country. Only since 1999, to accommodate the spirit of democracy and decentralization, the new law was ratified, and in fact it was one of the first laws to be ratified after the constitutions were amended. The heads of the local governments which were appointed by the national government based on the law of 1974 was changed to be directly elected by the

people. Local governments, based on the Law of 1974, were executing agents of development plans and policies drawn by the national government. Since 1999, the local governments are encouraged to initiate their development plans and policies, then execute them. The Law No 22/1999 on Decentralization promotes decentralization that expands and strengthens the mandate of governance to the local levels in a democratic way. The law of 1999 was quickly replaced by the law of 2004 as local governments are recognized as not prepared to execute a rather liberal decentralization as designated by the previous law. Nonetheless, the Law of 2004 was seen as a transitional but legal arrangement that reduces the negative excess of the previous laws, and is seen as inputs for redesigning towards the new law.

Prior to 1998, the unified nation of Indonesia has 62 urbanized areas that were administratively called cities. Today, there are 93 so-called autonomous cities and one city that is governed as the nation's capital provincial government which consist of five cities and one district. Before 1998, there 243 cities that werere the capital of regencies, today there are 412. Because of their locations and geographical positions in the country, each city has their their own contribution, also has their unique problems, challenges that related to their divergent demography, land issues, environmental, governance, economic, housing and basic services.

Law No 24/2007 on Spatial Management. This law replaced the previous Law of 1992 on Spatial Management which regulate spatial allocation and composition for conservation and built up functions. In the era of reform, there are efforts to denote spatial management as a tool for monitoring of spatial implementation. This effort allows for assigning local governments, either districts or municipalities, to develop into local regulations on spatial planning that are no longer has the style of indicative planning as in spatial planning at the national or provincial levels. The law has not explicitly regulated urban management, but justifies allocation of regional resources in a wise and accountable manner, and to ensure toward creating sustainable urban development.

Law No. 33 /2004 on Balance of National and Regional Public Budget. This law regulates sources of local government incomes and public budget allocation especially from the national to the local governments. Various opportunities for economic development and income potentials are drawn legally by the law.

Law No 32/2009 on Protection and Management of Natural Environment. This law is promulgated to replace the similar Law of 1997. The new law has positioned protection and management of the natural environment, not only as the reactive policies towards pollution control and environmental degradation, but also as ex-ante policies and serves a basis for development planning. It is expected that this law will be implemented consistently, thus it opens possibilities that approaches of environmental services and carrying capacity can determine how urbanization will be managed in the future.

Law No 1/2011 on Housing and Human Settlements. This law replaced the 1992 Law on similar subject. The previous law did not have a follow up and was left unreferred to. The new law offers strengthening of the institutions, amalgamation between housing and urban areas in the form of settlement, overcomes the complex arrangement of land allocation, and supports funding agencies for housing. This law also promotes upgrading and prevention on emerging slum areas.

Law No. 25/2009 on Public Services. This law is derived and elaborated from values embedded in the amended constitution which is human rights and affirms the responsibility of the government on public services.

Law No 20/2011 on Apartments. This law renews the commitment declared in the law on Apartments of 1987 that regulates the existence of apartments as a part of settlements, and the rights and duties related of the occupants and owners of the apartments. The 2011 Law adds the classification of apartments and its linkage with the public budgeting and financial system.

Aside from the above laws, other laws on technical and institutional arrangement that contribute towards urban management have been initiated, such as the Law No. 28/2002 on Building Construction, and the Law No 18/2008 on Waste Management.

1.5 Diversity of Indonesia

Challenges in conceptualizing and potentially implementing these laws are the wide-array of diversity, be it in the demographic dimension, local culture, local habits, ethnic difference and acceptance in Indonesia. Such diversity cannot be separated from the fact that Indonesia as an archipelagic country has a size of 5 million km² of which 60% are water bodies and the rest are the land. The land are located sparsely within 17 000 islands although only 13.478 of them are registered at the international agencies. Among them, five major islands contribute to the land size of 100.000 km², the rest is located in islands of the size of 20.000 km².

Not only the physical geographical characteristics that define the wide range of urban characteristics, the country hosts about 245 million population and is located in areas that have one of the highest biodiversity levels in the world which sustain about 600 local indigenous communities with their varied culture, orientation and development level. However, since 1945 the areas are proclaimed to be a part of unified country called the Republic of Indonesia. There are struggles for existence or freedom as well as social political in nature that threatens the existence of the country. The demand for unified one continues to be strong.



Figure 1-1: Map of Indonesia. (Source: http://www.nationsonline.org/oneworld/map/indonesia_admin_map.htm)

How to design and conceptualize rule of law that solidly consolidate divergent orientations, level of development, land and water bodies, with high population number that reside in sparsely located islands and high cultural diversity, will be the basis for developing future regulation.

1.6 Cities as the Gate of Globalization

Far from being functioning in isolation, urban management has to adapt to the 21st century globalization which morph into two forms, as follows:

First, the current form of globalization emerges through the concept of economic development based on free flow of trade. This flow will increase the movement of capital, people, goods, information and knowledge.

Second, globalization based on solidarity toward improving the quality of life, reducing the disparity and protecting the environment. Various covenants, protocols, agenda, programs, charters and commitments on protecting the environment and human rights are globalizing the ethics and values that influence nation building.

Like it or not, urbanization is the second agent of the globalization. Facilitated through investment flow, consumption patterns, configuration of urban areas are shaped to

support such flows and patterns. Through flow of information and knowledge, intellectual deliberation and partnerships between civil organizations, urbanization becomes the agent of globalization of values and norms. As a result, conflict, screening and competition in globalization begin in urban areas. Varied global events, globalization of solidarity is sternly in conflict with the globalization of free trade.

Competition is a condition and an ability to uncover benefits out of globalization, predominantly in attracting investment. To attract investment thus cannot be easily executed without concern on the screening process that would filter out investment on exploitative and negative impacts.

1.7 Incremental Regional Development

Since the beginning of 1970s, incremental housing expansion has blossomed, organized by corporations. This expansion continued and diverted to rural areas and aimed at various income groups and interests. By the end of 1980s, there are hundreds of houses in Jakarta located on up to hundreds of hectares. When the conference of Habitat II took place, Jakarta and its surroundings has housed 26 settlement concentrations, and in other locations there were about 15 settlement concentrations, each with a size of more than 500 hectares. Cities emerged in adjacent of Jakarta, are formed as collection of settlement concentrations that create a mosaic, unclear patterns of urban settlement. Fast growth of these settlement took place incrementally that do not form as integrated clusters of settlements and deemed inefficient for its residents.

Incremental development has been identified since 1970s and law No. 4/1992 on Housing and Settlement was enacted in order to manage the already built-up areas which were managed by the governments. The law never got a chance to be implemented satisfactorily that incremental development intensified to be a part of problems of urbanization at this time. at the same time, as weak institutional arrangement, complication on land allocation and public budgeting created by the centralized political administrative system prevent specific local-oriented problems to help direct solutions presented in a follow up laws. A revised and improved Law No. 1/2011 on Housing and Human Settlements Area was enacted that authorize local governments to provides directives policies and gives a mandate to a single national ministerial office to coordinate comprehensive housing and urban development policies. This law has not yet fully implemented and in the near future it makes only sense to fully be embraced through commitment to implement .

1.8 National Policies and Strategies on Urban Development

As the head of the nation began to be elected under the amended constitution of 1945, so was enacted the Long-Term National Development Plan 2005-2025. The goals of the Plan among others is to fulfilldemand of settlement and of its supportive basic services for all members of the society, supported by long term housing financial system that is sustainable, efficient and accountable in order to create *cities without slum*. The national government, c.q.

Bappenas, prepares National Policies and Strategies for Urban Development (KSPPN) towards Sustainable and Competitive Cities of 2045 for the welfare of the society. KSPPN defines sustainable cities as urban areas designated, developed, and managed to satisfy the demand of its residents in environmental, social, economic dimensions without sacrificing the sustainability of natural habitat, ecosystem, built environment and social environment. This definition, conceptually and operationally, has to be elaborated so that the aims of social welfare do not have to wait until 2045.

KSPPN is implemented through assessing autonomous cities which are defined as cities which have administratively-delineated boundaries. It is then followed by the classification of cities based on the number of population. Small cities are those that is resided by less than 100,000 people, medium cities are occupied by population between 100,000 – 500,000 people. Large cities are where 500.000 to 1.000.000 people live in and metropolitan cities would be inhabited by more than one million population. This classification is not based on particular concepts or local accounts, but is initiated to simplify in policy formulation.

In 2014, about 412 cities that are stated as the capital cities of districts, and 2137 cities are a part of capital cities of sub districts, are not analyzed under KSPPN. For 93 autonomous cities and 5 cities belonged to the province of DKI Jakarta, have been analyzed on trying to find a better way to measure their sustainability performance.

It has been identified that current factors which contribute the least to the sustainability of cities are national urban system, urban services, urban economics, urban governance, natural environmental protection. Yet factors that best contribute toward sustainability of cities are the socio cultural aspects. In order to reach ideal urban system, there is a need to improve what has been least achieved from the current condition. There is no definitive answer and ongoing debates to what is defined as ideal national urban system, whether or not it is about the functioning of urban growth poles at the national, regional, local and village levels, or is it about specialized economic zones that encourage urban core to be the engine of economic activities. Urban services needs to be built with a sustainable principle in mind. Meanwhile, socio cultural strength of the people should be used actively to improve community practices on sustainable and healthy lifestyles.

KSPPN prioritizes the improvement of urban services and on the national urban system. Urban services include transportation system, energy supply, clean water supply, sanitation and solid waste, public health facilities, education facilities. The national urban system is to be strengthened through sub strategy on internationalization of metropolitan areas, and on small cities to be connected as rural urban linkages. Policies and strategies on KSPPN regulates more on the goals for the future and do not analyze much on the varied experiences, issues and realities of urban activities in Indonesia, especially after decentralization and human rights concerns enter into the governance of urban areas. Invasion and global business penetration do not end at the metropolitan cities, but also to

rural areas. In the case of natural resources exploitation, global penetration reaches to remote unpopulated areas. Rural urban linkages thus are also about relations between metropolitan and rural areas.

The National Report will complement KSPPN on issues such as conceptual framework and values to describe the measurement account on sustainable urbanization, empirical evidence that support policies and strategies on urbanization. This national report is about Indonesia's experiences, achievements, ongoing programs and emergent issues, debates, challenges and preliminary thoughts for the future. In the coming months this report will be shared to all urban stakeholders and habitat agenda partners to get feedback and inputs, and to propose an agreed-upon common new agenda for the Habitat III goals and objectives applicable to the challenging and complex urban development of Indonesia.

II. Urban Demography

2.1 Managing Rapid Urbanization

Based on 2010 Census from Statistics Indonesia, the total population of Indonesia is 237.641.326 people. About half of the population (49.79 %) now lives in urban areas. Table 2.1 shows that for the last forty year urban population grows faster than the average population growth. Current urbanization level is a result of a migration pattern to urban areas that accelerate especially during the high economic growth period.

Table 2.1. Total Population and Urban Population in Indonesia in 1971, 1980,1990, 2000, 2010

Year	Total Number of Population	Total Number of Urban Population	Percentage of Urban Population (%)
1971	119.208.229	17.642.817	14.8
1980	147.490.298	25.663.311	17.4
1990	179.378.946	55.428.094	30.9
2000	206.264.595	87.249.923	42.3
2010	237.641.326	118.345.380	49.8

Source: Statistics Indonesia(1997), (2001)

At the national level, a consistent increase in urbanization level from 14.8% (1961) to 17.4% (1971), then 23% (1980) to 30.9 (1990), and the last decade from 42.43% (2000) and 49.79% (2010) is noted, despite the fact that the socio political systems abruptly changed, beginning with the installation of New Order in 1966 and later with reform of 1998. Such trends however, have to be cautiously examined as the definition of urban areas between census changes. Change in definition of urban areas had implied that policies and strategies for urban development were not always accurate to tackle urban issues.

Major improvement on definition of urban areas was designed for the 1980 census. The location of a village is no longer used as the basis to determine the classification of urban areas. The use of other variables and is analyzed through a linear ordinal scoring, so that the assessment can be refined and adjusted.

Scoring is applied to population density per km², percentage of households work in agricultural sector, and the presence of urban facilities in a village. The three variables are defined that a village is an urban area if: 1) population density is 5000 or more people per km²; 2) less than 25% of households work in agricultural sector; 3) at least eight urban facilities (asphalt roads, movie theatres, primary, secondary and tertiary school buildings, hospitals, maternity clinics, health clinics, bank, industrial land, permanent market, restaurants, electricity, rental services for party equipment, distance to district and public transportation) are present.

The criteria for urban areas used in 1990 census, was applied again in the census of 2000. The only difference is that in the 2000 census, modification of the scoring system is emphasized. The modification is based on the amount of urban facilities, which in the previous census is only considered for its presence. In this census, access to the facilities measured by distance to the village center for each facility is introduced. In the 2010 census, classification system of urban village remains utilized.

The above explanation gives indication that only the result of the last two censuses (2000 and 2010) is comparable. Based on these censuses, high urbanization level is concentrated in Java island. The province of DKI Jakarta has 100% urbanization level that makes the city the most urbanized in the country.

Statistical numbers cannot describe socio cultural change resulted from densification and transformation to non-agriculture sector. Thus, even based on the statistical score a village is classified as urban, they cannot capture the realities of socio cultural life representing rural lifestyle. The management of urbanization means that it is about : (a) management of population, and (b) management of urbanization as monitoring migration and mobility.

a) Management of Population

The management of demography is often connoted with managing natural urban population growth via reducing birth rate and death rate, and improvement of reproductive capacity. Such effort was initiated in 1957 by Indonesian Medical Doctor Association (*Ikatan Dokter Indonesia/IDI*) via Association of Planned Parenthood in Indonesia (*Perhimpunan Keluarga Berencana Indonesia/PKBI*). Since 1969, such initiative became a government program conducted as a centrally institutional approach and coordinated under BKKBN. The goal of family planning was to reduce birth rate in the year of 2000 to be half of that in 1971. In 1993, the State Ministry of Population and Natural Environment was established as the only of its kind that combine population management with conservation of environment. This decade-long family planning measures bear fruit of declining annual population growth rate from 2.31% (1970-1980) to 1.98% (1980-1990) and to 1.49% (1990-2000). In the period of 2000-2010, annual population growth rate remained at 1.49%.

The stagnant population growth rate in the last two decades however contradict with the absolute number of babies born during this decade. Reform of 1998 led to a loosening of the state-led population control. The birth rate at the last decade leaped back raising a concern of a so called demographic dividend. It happens when the proportion of population in the productive age groups (15-64) reaches a maximum and the dependency ratio is at its lowest level. In Indonesia, such demographic dividend will take place in the decade of 2025-2035. It is expected that such dividend can be used as opportunities to utilize its working age population and maximize economic productivity.

In the era of decentralization, a new framework of law is instilled, first by replacing Law No 10/1992 on population growth and family planning with the Law No.52/2009 that states the governments are held responsible for directing population mobility and connected to natural carrying capacity. Later on, registration of population is mandated by the Law N0.24/2013. Among others, the implementation of the latter law is by creating electronic ID cards (e-KTP) for all Indonesian citizens. In the arena of family planning, the mandate of the implementation of the program is given to local governments.

During the period of 2000-2010, local governments were caught unprepared to lead in such population control. Such initiative was categorized as a social program. In the era where it was not popular to clinch state funding to social programs, family planning suffers from a lack of funding. Now that the national government reminds local governments of a prospective situation of population dividend, the local governments are asked to prepare themselves to facilitate and educate its young population, and creating supportive environment for refining their talents and skills. Only by preparing and engaging its young population in development, windows of opportunities coming from population dividend are utilized to the fullest.

b) Management of Urbanization as Monitoring Migration and Mobility

Management of urbanization is not aimed at preventing urbanization to take place, but to take advantage out of urbanization activities. Migration and mobility thus cannot be halted but to be made aligned with the law No 52/2009 on Population. In migration and mobility, there is a so called selection process, in which people decide to reside or create a movement pattern. Migration and mobility of productive age population is often related to employment opportunities. In the formal sector, employment opportunities become selection process to which prospective labor will reside. In the informal sector, migration of prospective labor often becomes the burden for destined areas. During the New Order era, government sponsored transmigration program encourages migration from rural to rural areas in search of a better living condition. Since reform of 1998, transmigration program is no longer a main force in population redistribution.

During the New Order era, one of the efforts to control migration from rural to urban is by creating a program called ‘engineering urbanization in rural areas’, conducted by the State Ministry of Population and Environment/Head of BKKBN. The term ‘engineering’ is not well used within the discipline of demography. However, it is reintroduced to indicate ‘efforts to accelerate urbanization in rural areas’ by targeting small cities as the destination of migrants. Thus, small cities become buffer that prevents direct migration to larger cities. The existence of small cities surrounding rural areas allow for commuting. Access to transportation should be planned as link and match so as to improve the quality of commuting and reduce permanent migration.



Figure 2-1: Commuter train in Jakarta, special coach for women. (Source: Urban Demography Team)

2.2 Managing rural-urban linkages

As urbanization level flock people to move and live in urban areas, a linkage between rural and urban areas changes shape. There may be a high flow of population to urban areas, but reversed connection emerges in the form of cash flow, urban habits and traditions, or knowledge dissemination. Rural areas often become a place of expression for urban migrants. Disparities between rural and urban can grow larger as rural areas lost population. It is projected in 2050, the proportion of rural population to the total population is only 30%, with the absolute number of more than 100 million people. Currently measurement of quality of life such as proportion of poor people, per capita GDP, HDI, Health Index, Infant Death rate, shows that measures of urban population thrives better than those of rural people. Uniqueness of rural culture and landscape are the main elements used for competition with urban living. Traditional or indigenous villages (*desa adat*), village arts, agricultural living, interaction with nature are some of the rural based themes that can promote rural attraction. Aside from this, rural areas continue to support the urban areas in the form electricity generation, water sources, macro climate, and food production.

Management of rural urban linkage is also about managing disparities between rural and urban areas. Such disparities are overcome by decentralization and strengthening of rural governance. Law No 5/1979 on Village has been revised into Law No 6/2014. The latter law is aimed at reforming state governance, by appreciating: 1) pluralism in villages of Indonesia, where villages can form in many shapes and culture; 2) position and roles of villages as a part of unified country of Indonesia. A village is not automatically a part of district governments,

but recognized as exercising self-reliant power and resource management system, and; 3) ensuring subsidies to villages as a part of state responsibility toward rural people in order to escape from rural marginalization.

District government is a form of government who has a right and full responsibility to facilitate capacity building of village governments in order to balance and respond to external forces and pressures. Annual holiday exodus or *mudik* tradition becomes a major event of the year when city people visit their families; often reside in small cities or rural areas at the end of Ramadhan month. A clever district government can play a role to these visitors by attracting them to stay longer or create opportunities for local business. District government in the future has to play a larger role in managing rural urban linkages especially that allow for retaining local resources to be extracted for local benefits.

2.3 Addressing the Needs of Urban Youth

Based on the law No.40 /2009 on Youth, individuals whose age between 16-30 years old is categorized as youth. While based on the Law No 23/2002 on child protection, up to the age of 18 years old, an individual is categorized as a child. Legally, there is overlapped age in which youth is also categorized as a child.

In Statistics on Youth, in the year of 2010, youth living in urban areas are 33.378.741 people, while in rural areas are 28.965.014 persons. Considering population structure and phenomena of population dividend, in 2025, there will be a peak of youth among the productive age of 15-64 years old (68.7%).

Currently, Susenas 2005 and 2007 shows that youth participation rate in education in high school reaches 53,9% (2005) and 54,1% (2007). While such participation rate at higher education increased from 12.2% (2005) to 12,6% (2007). Illiteracy rate of youth descents from 2.6% (2007) to 0.9% (2008). In 2007, female youth tend to be illiterate (3.1%) compare to their male contenders (2.1%).

Based on the employment status, about half of Indonesian employed youth (50.6%) work in informal sector (either self-employed, self-employed with a help of temporary labor, temporary labor or household/unpaid labor). Employed youth in urban areas (70%) is twice as likely to work in formal sector (self-employed with permanent/paid labor or employees) than those in rural areas (28%). This indicates that employed youth in urban areas have more employment security than those in rural areas.

Table 2.2 Employed Youth, based on Employment Status and residency in Indonesia 2010

Employment Status	Urban		Rural		Total	
	#	%	#	%	#	%
Self-employed	2.401.338	14,75	2.816.860	7,64	5.218.198	16,18
Self-employed with help from temporary/unpaid worker	264.451	1,62	1.556.247	9,75	1.820.698	5,65

Employment Status	Urban		Rural		Total	
	#	%	#	%	#	%
Self-employed with help from permanent/paid worker	463.726	2,85	370.263	2,32	833.989	2,59
Laborer/worker	10.938.028	67,17	4.169.897	26,12	15.107.925	46,84
Freelance worker	1.478.967	9,08	2.139.368	13,40	3.618.335	11,22
Family / unpaid worker	738.081	4,53	4.914.040	30,78	5.652.121	17,53
Total	16.284.591	100,00	15.966.675	100,00	32.251.266	100,00

Source: Statistics on Youth 2010 in Simanjuntak (2012).

Taking a deeper look at the table above, it shows that about 17 million urban youth and 13 million rural youth are not in labor market. This may indicate that they are studying or outside of the market. As this youth is a part of demographic bonus, their capacities to be productive are highly dependent on the facilitation of their talents, skills and other education. Education infrastructure and other supportive facilities are mandatory to ensure this generation will step their feet on the right directions of labor absorption. Creative industry is another sector in which youth employment participation can begin early with easy entry. Cities such as Solo is well-known for their design industries, Cimahi is focused on animation and Jember is on fashion businesses.

Youth potentials may not be accommodated in the right track. Some youth experiences with illicit activities such as drug abuse, crime and violence. In 1998, about 40% of patients in hospital suffered from drug abuse. Since 1995, high school level youth has a highest level of drug abuse ($\geq 30\%$). A study by University of Indonesia and BNN estimates that drug abuse reaches 3.8 million people at the productive age (10-59 years old) or 2.25 of total population.

In the reform era of 1998, youth are freely expressed their interests in various fields. Hobbies such as photography, dance art forms, sports, social based communities, not for profit activities, entrepreneurship and others. These communities can contribute to the communities such as *community 1001 Books* which manage libraries for children, *Indonesia Teaches* (www.indonesiamengajar.org) to fill in the vacant slot of primary school teachers; *Academy shares* which aim is to share applied knowledge, understanding, orientation and experiences to improve competence in selected fields of the participants; *Card-to-Post* asks the youth to be creative by making post cards to send messages; *Plastic Bag Diet* (www.dietkantongplastik.info), national campaign to ask community to wisely use plastic bags; *Indonesia story telling* as movement to promote education through story telling; *Indonesia gardening* (www.indonesiaberkebun.org) communities specifying in social media network to spell out positive messages on urban environmental awareness and *urban farming*, which is aimed at converting vacant land into agricultural land in urban areas.



Figure 2-2 Urban Farming in Jakarta initiated by Indonesia Berkebun on idle urban land(Source: www.indonesiaberkebun.org)

2.4 Responding to the Needs of Aging Population

In Indonesia, in 2000, the proportion of aging population is about 7.8% and increasing to 9.77% in 2010. In this year, the number of the aging population is similar to the number of children under five years old. In 2020, such proportion of the aged will reach 11.34%. Currently, the aging population is about 24 million and in 2020 is expected to reach 30-40 million (BPS, 2012). At the same time, average life expectancy of Indonesians increase from 64,5 years old (2000) to 69.43 years old (2010) and 69,65 years old (2011).

Care for the aging population is reflected through the creation of several laws and regulations. Currently, Indonesia has several regulations to protect the welfare of the aging population, starting with the Law No 13/1998 no The Welfare of Aging Population, Government Regulation No 43/2004 on Implementation of Improving the Welfare of aging Population, Presidential Decree No 52/2004 on National Commission on the Elderly Welfare, The Regulation of the Ministry of Home Affairs No 60/2008 on Guidelines to Establish Local Commission on the Welfare of Aging Population and Community Empowerment for Supervising Aging Population.

Following these legal basis, the government formulates National Action Plan for the Elderly (RAN-LU) 2009-2014. The goals of the RAN-LU are: 1) to launch and strengthen the institutions dedicated for elderly welfare; 2) to consolidate policies/programs among government institutions in supporting the elderly welfare; 3) to intensify supports and assistance toward the elderly who are in destitute situation, with disabilities and facing abuse;

4) to promote and maintain supports from the families and society for the elderly welfare; 5) improve welfare services for the elderly; 6) to foster the quality of life for the elderly, be in the economic, mental, religious, or self esteem and self assurance dimensions; 7) to promote the availability of infrastructure and specific facilities for the elderly; 8) to improve the quality of education for elderly independence, and; 9) to foster international cooperation networks. With these action plans laid out, there are not many improvement implemented for the elderly.

The international agency, WHO, promotes Age Friendly Cities at the world scale, which consist eight topic areas (WHO, 2007) which are::

- a. Outdoor spaces and buildings
- b. Transportation
- c. Housing
- d. Social Participation
- e. Respect and Social Inclusion
- f. Civil Participation and Employment
- g. Communication and Information
- h. Community Supports and Health Services

These topic areas are expanded into indicators. In general, if a city can fulfill about 25% of the indicators above, the city can proclaim as an age friendly city. In Indonesia, three cities have been declared as age friendly citeis which are Surabaya, Payakumbuh and Sukabumi (diolah dari berbagai sumber, 2014).

Surabaya, as the age friendly city, has launched Elderly Friendly Movement, which initiate: 1) improvement of life expectancy for male and female elderly; 2) assistance and training, and creation of Karang Wreda (Elderly Association) in each kelurahan; 3) design open parks with age friendly facilities; 4) promotion of elderly friendly infractructure such as toilets and pedestrian pathways; 5) promotion of elderly friendly public transportation, with low-floor buses; 6) establishment of local Commission for the Elderly welfare; 7) integration of development programs among government institutions, such Social Section, Public Works Section, Clean and Parks Section, Health Section and other Sections¹.

¹ Hilda. 2012 Surabaya : Age Friendly City. Gapura. A Magazine fromthe Municipality of Surabaya. ISSN 1978-3663. Vol XLIV. No.66 Oktober 2012.



Figure 2-3 Parks for the Aging Population in Surabaya.(Source: Bappeko Surabaya)

Data from BPS (2007) shows that about 11 provinces have a proportion of aging population of more than 7% from their total population. They are DI Yogyakarta (14.04%), Central Java (11.16%), East Java (11.14%), Bali (11.02%), South Sulawesi (9.05%), West Sumatera, North Sulawesi, West Nusa Tenggara, West Java and East Nusa Tenggara. On the other hand, about five provinces have the least proportion of aging population which are Papua (2.15%); West Papua (2,92%), Riau archipelago (3.78%), East Kalimantan(4.53%) and Riau (4.86%).

Some of the aging population remains a part of labor force of which they are called potential aging population. Potential aging population are often found in countries which do not have social assistance for elderly such as pensions, thus force them to continue working. About 59.12 % of total elderly in Indonesia is categorized as poor, and they consist 27% of total poor people with average education of primary school and with no permanent occupation. In 2011, based on Sakernas, almost half of the aging population (45.41%) in Indonesia remain working, about 28.69% running households, around 1.67% are unemployed or looking for work, and 24.24% are doing others. It follows that labor force participation rate among male aging population (72.26%) is higher than that of female (37.38%).

The economic sector which this aging population work, agricultural sector remains the first choice (60.92%), followed by service sector(28.80%), and manufacturing sector (10.28%). When looking at their residence, there are employed aging population lives in urban areas (51.46%) more than in rural areas (38.99%). This sounds contradictory. The types of employment available for aging labor force in agricultural sector tends to be informal which can be fulfilled by skills of these labor.

In Indonesia, the quality of health for the aging population is considered low. Reports from The National Commission of the Aging Population shows that health complaints by the

aged tends to increase, from 48.95% in 2003 to 54.25% in 2007. Rate of sickness among the aging population also increases from 28.48% in 2003 to 31.11% in 2005. This condition has worsened by elderly neglect. In 2006, about 2.7 million of the aged or 15% of the total aging population are neglected by their families or their communities (National Committee for the Elderly/Komnas Lansia). Aging population requires extra attention when it comes social security and safety. Urban areas are often more equipped with facilities for the aged, including health facilities.

Living during the era where fast policy changes, value shifting, the welfare of the aged depends on facilitating them to remain independent, and thriving when in the communities. Physical facilities such as exercise grounds, playground, meeting points or community centers can be a place for the aged to continue interacting.

In Indonesia, the elderly has a special place in an extended family. They are often still respected becoming a center of attention, well taken care of, are being involved in many family functions either religious or cultural. Their involvement in the extended family affairs however are minimal, they act passively and tend to be the one who command harmony and provide soothing when a situation get tense.

As society's norms and values change, high productivity of human being becomes more commanding in determining one's lifestyle, treatment to the elderly also shifts. Government policy on retirement age for civil servants changes from 56 to 58 years old. In the future, there will be a round of aging population that refuse to retire, and prefer to see jobs as self expression. The economy may benefit from such activities.

2.5 Integrating Gender in Urban Development

Physiologically, male and female gender differs, but a construction of culture causes divergence in rights and duties, and rights and responsibility. Reasons created based on such physiology, creates discrimination, subordination, marginalization, domestication, and label calling that make women never hold jobs or certain social positions, and cannot play leadership roles. Efforts to change cultural values ask for gender mainstreaming. Efforts to expand womens space and change perceptions are called gender mainstreaming. Following international commitment, the government of Indonesia has ratified UN-sponsored *Convention On The Elimination Of All Form Of Discrimination Against Women (CEDAW)*, which obliges countries to eliminate discrimination and promotes equality and justice based on gender, either temporary or permanent.

The Presidential Instruction No 9/2000 on Mainstreaming Gender in National Development Plan is an attempt to reduce gender bias in formulating national development policies and plans. This instruction also prioritizes on the need to mainstream gender on policies, on leadership and within government institutions at various levels, guided by the State Ministry of Women and Children Empowerment.

National Long-Term Development Plan (RPJPN) of 2005-2025 states that the guidelines of development toward women and children empowerment are promoted to achieve the nation that is competitive. The specific policies are on improving the quality of life for women, child welfare and protection, on reducing violence, exploitation and discrimination based on gender, and on strengthening institutional arrangement for gender mainstreaming network. In RPJMN 2004-2009, it was stated some issues regarding gender status such as unequal access for male and female groups in development, gender bias laws and regulations, gender discrimination, weak institutional acceptance on mainstreaming gender and children, including low participation rate, have not been fully retracked.

These issues of gender bias development was subjugated through guidelines stated in RPJMN (2004-2009), which are:

- a) To promote women participation in political processes and public offices;
- b) To improve level of education and of health services as well as in other fields, to advance their quality of life;
- c) To express through campaigns to end violence against women;
- d) To strengthen institutional arrangement through coordination, gender and children mainstreaming in planning, implementing, monitoring and evaluating various levels of policies, programs and activities in various sectors.

The policy guidelines in RPJMN 2010-2014 for gender mainstreaming is defined as to reach towards gender equality and justice and to continue improving gender based participation in development.

Gender is defined as differences in behaviours, roles, function and status between male and female sexes, and is not defined based on biological perspectives. It is based on social cultural relations that is influenced by societal structure. The Presidential Decree No 9/2000 outlines strategies for gender mainstreaming which is to integrate into process of planning, formulating, implementation, monitoring and evaluation in national development policies and programs

Gender mainstreaming is implemented all ministries/boards, either government or non govermenmtal agencies, as well as all levels of government from national, provincial to local levels. The strategy is to incorporate gender analysis into working programs, and incorporate integration of experiences, aspirations, needs and interests of female and male population into development processes. The goal of gender mainstreaming is to ensure that female and male population are treated equally and just when Access to, Control, Participate in, and Benefit from (ACBP) development.

The government of Indonesia also issues the Regulation of the Ministry of Finance No. 119/PMK.02/2009 on promoting gender responsive budgeting. Gender responsive budgeting is not the objective of the budgeting, but is a working framework or an analytical

tool for budgeting policies in order to include gender equality through just and proportional budget allocation.

Measurements used for monitoring progress in development and used by the Indonesian government at various levels is human development index (HDI). For gender status, there is Gender-related Development Index (GDI). The high level of difference between GDI and HDI leads to gender disparities. Since 2004, GDI in Indonesia increased from 63.94 to 68.52 (2012), while the average index between these years is stagnant. The provinces of DKI Jakarta, North Sulawesi, and DI Yogyakarta are the three ones that reach the best HDI and GDI between 2006-2012. Issues on gender mainstreaming take on the realities below:

- Women who finished primary, secondary and higher education reaches about 84,24%, or lower than men (89,94%), although such proportion is better in urban than rural areas;
- Percentage of women (15-49 years old) who wear contraception in urban area are 61.47%, which is higher than male participation in family planning through vasectomy (1,68%). In rural areas, women participation (63,33%) is higher than those living in urban areas. Similar pattern is found with male participation in family planning (0,75%).
- The proportion of women participation in urban areas (≥ 15 years old) is the highest as worker (44,74%), and the second as homemaking (38,52%).
- Main occupation of female in urban areas is in trade sector (38,38%) and social and individual services sector (27,57%). In general, female participation rate (47,91%) is lower than that of men (79,57%). Male participation in employment is favored by the fact that male is viewed as breadwinner of the family. Wages of male worker is higher by a ratio 0,8 than that of female workers, although the gap reduces.
- Women participation in politics and as civil servants only reaches 20% except in DPD that reaches more than 20% (BPS, 2012).

In urban areas, informal sector continues to be decorate the economy. Informal sector is not only for those who cannot enter the formal sector, but also for those who start their business safely. The informal sector is characterized by easy entrance, using local sources, mostly family owned, small scale operation, labor intensive, low skilled and little formal education, unregulated but competitive markets. Currently there are 37.56% of female work force engage in the urban informal sector, compare to male work force (33.68%). However, about 75.11% of female work force engage in the rural informal sector, and about 67.29% of male work force go into the sector. This shows that informal sector especially in trade sector is still labor intensive, and job provider in urban and rural areas.



Figure 2-4 Informal economy. (Photos: Lana Winayanti, 2013)

Women in Indonesia, in general, play roles in society based on social cultural values imposed to them. Family planning, voicing opinions, and inheritance remains a sensitive issue for women, beyond the reach of public policies. Gender issues in Indonesia is still a cultural domestic issues.

III. Land and Urban Planning

3.1 Ensuring Sustainable Urban Planning and Design

Before the reform of 1998, during the enactment of the law no 24/1992, Spatial Management in Indonesia was organized as a top down approach. The national government initiated regions where spatial plans are to be formulated, and with limited engagement from the public. The concerns were the need for uniformity, conformity, regularity and harmony. Local variations, differences, disagreement, and changes were disregarded. This led to unsatisfactory situations such as floods, landslides, traffic jam, slum area, lack of public space, and regional disparities (Ernawi, 2007) that were also ignored. The Law has not fully been effective and efficient to solve problems of spatial management that changes overtime.

Reform in Spatial Management began when the Law of 24/1992 changed to Law no 26/2007. The new Law brought about the values of decentralization, recognition of local values, and local demands. The Law recognizes division of authority between the national and the local levels that prevent overlap of authorities. On the monitoring of Spatial Management, a mechanism concept of discretion system through permits shifts to regulatory system through zoning ordinance. it is expected that spatial implementation will be under control.

Furthermore, this Law is followed by implementing regulations, including guidelines for formulation, implementation and monitoring of spatial plans. The guidelines for the macro level spatial plans differs to that for the micro level. This is executed under the principles of directiveness, effectiveness, targetted. One of the major changes in implementing the Law of 26/2007 is that Spatial planning (RTRW) formulation has to be executed for each level of governments, be it provinces or municipalities/districts. At this time, of the 34 provinces, 25 of them have had legalized provincial spatial plans (RTRWP). Within 398 districts, about 291 districts have legalized district spatial plans. For 93 autonomous municipalities, 75 of them have legalized municipal spatial plans.

Aside from the Spatial plans, it was mandatory to derive that plan into detailed plans. Detailed plans as instrument for plan implementation is also mandatory for municipalities and voluntary for districts. Detailed plans are Detailed Spatial Plans (RDTR), then Building and Environment Lay out Plans (RTBL) and masterplan. RTBL and RDTR can be in the same level within the hierarchy of spatial plans. however, RTBL is not detailing the RTRW but as instruments to apply and monitor the utilization of space for specific functions. RTBL can be in the form of community-action plan (CAP), neighbourhood-development plan (NDP), Urban-Design Guidelines (UDGL)(Pcarskot, 2011). Examples of RTBL in Indonesia are: UDGL DKI Jakarta, RTBL of Higher Education Region of Jatinangor, RTBL Historic Town of Ampenan, etc. Aside from RTBL, there are also the so called *master plan* that lay out the development strategy of an area. A masterplan can be initiated by the government of the private sector such as government-initiated *Master plan* of Bandung City or masterplan of

National Capital Integrated Coastal Development (NCICD) or private sector initiated master plan for new towns in Kota Baru Parahyangan, Bumi Serpong Damai, etc. With the masterplan, the large scale development efforts have a development plan that can promote efficient and effectiveness of the urban services.

Aside from the mandatory spatial plans, the governments at various level are encouraged to adopt theme based programs such as Green City Development Program (P2KH). P2KH is to promote expansion of green open space in order to halt the negative effects of climate change. This program has been followed by 36 districts and 24 municipalities. Many implements P2KH through Detailed Spatial Plans. The ministry of Public Works have facilitated P2KH through formulation of Green City Action Plan, developing masterplan and technical plans for green open space (RTH), initiating green maps, partnership with green communities in public campaigns, implementing pilot projects (Kirmanto, D.; Ernawi, Imam S., & Djakapermana, R. D., 2012). Private sectors, as a part of their Corporate Social Responsibility (CSR) are also encouraged to engage in green cities (Rosyadi, 2013).

Other theme based program is Preservation and Management of Historical City (P3KP). P3KP is a program that attempt to preserve historical part of the city to be unique, and to be a part of world historical urban assets (Directorate General of Spatial Management, MPW, 2014). There are about 26 districts/municipalities in Indonesia participate in creating historical cities as a bridge to gain recognition from UNESCO (The Ministry of Public Works, Government of Indonesia, 2012).

3.2 Improving Urban Land Management and Addressing Urban Sprawl

Currently Indonesia has several regulations on land management, among others are the Law No 5/1960 on Principles of Agrarian Land, Law no 5/1967 on Principles on Forestry, Law no 26/2007 on Spatial Management. The Law no 5/1960 regulates the rights to land and land registration, which becomes the basis for land management. In implementation, land management is not yet well administered. World Bank (1994) reveals that management of land uses in Indonesia is complex, added with limited framework and too many parties involved. The focal issues is on land ownership and land registration. Only about half of urban land in Indonesia is registered in the website system belonged to the National Land Board (BPN) as the National government owned who manage land administration. Problems emerge related to land certification. Hudalah (2011) notes that in practice, many uncertainties on licensing fees and time frame in land registration procedures lead to such situations. Some are charged higher than other with various time frame causes especially the low income groups failing to register their lands. BPN regulation No. 1/2010 describes land registration procedures to be finished between 38 to 97 days. hari. In its implementation, without added retribution, the procedure can take about six months to one year (Hudalah, 2011). Many local offices of BPN cannot explain the detailed procedures, time frame and fees needed for finishing land registration.

Uncertain land status influences implementation of spatial plans. Land ownership maps cannot be referred to for spatial plans. Planning documents, either RTRW or RDTRs, are formulated with the assumption that all lands can be allocated to any uses. When implemented, barriers come from land acquisition inconsiderate of land ownerships. Such barriers have influenced the implementation of infrastructure development. The root cause of this land acquisition comes from the Law No 5/1960 whose assumption lies in the agricultural economic orientation that emphasizes absolute individual land ownership. The government anticipates by enacting another Law No 2/2012 on land acquisition for public interest construction to assist with infrastructure development in urban areas.

In implementing decentralization, some of the authority of BPN moves to the local level such as permit issuance for constructions. The Ministry of Finance also has decentralized the authority to collect property taxes (*Pajak Bumi dan Bangunan/PBB*) to the local governments. The collected fund can be fairly utilized for development at the local level without waiting for funding transfer from the national government. This helps accelerate development at the local level. However, there are not many institution setting and available instruments/tools that can help the local governments to manage property tax.

Another issue of physical-spatial matter is urban sprawl which is demonstrated by the growth rate of urban land expansion is larger than that of urban population, and is not offset by decentralization of growth centers.



Figure 3-1: Urban sprawling around Jakarta. (Source: Iwan Kustiwan, 2014)

Urban sprawl has created ignorance on environmental degradation, infrastructure development, and conflicts between government levels. Several programs by BPN are aimed at managing urban sprawl are:

- Providing information on land market in the form of land value zones and economic value areas zones. This will support viable construction of infrastructure, strategic zone and special economic zone development;
- Land stewardship through land tenure and land uses through consolidating its utilization and institutional arrangement, as unified system for creating just public interest;
- Asset legalization in order to ensure law certainty on land ownership through National Land Certification Program (*Prona*), agricultural land certification program, fishermen land certification program, Medium and Small industry land certification program, transmigration land certification programs, low-income land certification programs, and;
- Social mapping as a complementary formats of land inventory for tenure, ownership, uses, and utilization to limit urban sprawl.

3.3 Enhancing Urban and Peri-urban Food Production

The need of the population for settlement leads to land conversion especially from agricultural to built up. The ministry of agriculture states that in Java island, in 2014 alone, 85.574 hectares of agricultural land converted into urban uses. This condition has been anticipated by the government and its limited conversion is regulated through the Law No 41/2009 on Agricultural Land Protection toward Sustainable Food Production (PLP2B). Fertile land for Food Production (LP2B) is prearranged agricultural land that are protected and utilized continuously for food production, in order to guarantee food independence, security, and sovereignty. LP2B consists of irrigated agricultural land, tidal marsh reclaimed land, marsh reclaimed land, and non irrigated fertile land. In urban areas, LP2B is aimed at limiting land conversion through intensive program supporting PLP2B such as agricultural infrastructure development, funding for R&D in protecting seed variety, easy access information and technology, supply of facilities for agricultural production, assurance of land right certification on LP2B, and rewards for urban farmers. Converting LP2B, however, can only be implemented if the land will be used for public infrastructure such as public road, dams, reservoirs, drinking water and clean water distribution network, irrigation buildings, ports, airports, railway stations and railway lines, terminals, public health facilities, nature reserves, powerplants and its distributions, and if disaster struck the land. Such conversion has to fulfill requirements such as strategic feasibility analysis, land conversion and land acquisition plans, and the availability of substituting land from LP2B conversion. Thus agricultural land conversion located in urban areas cannot be easily implemented, except if for public interests.

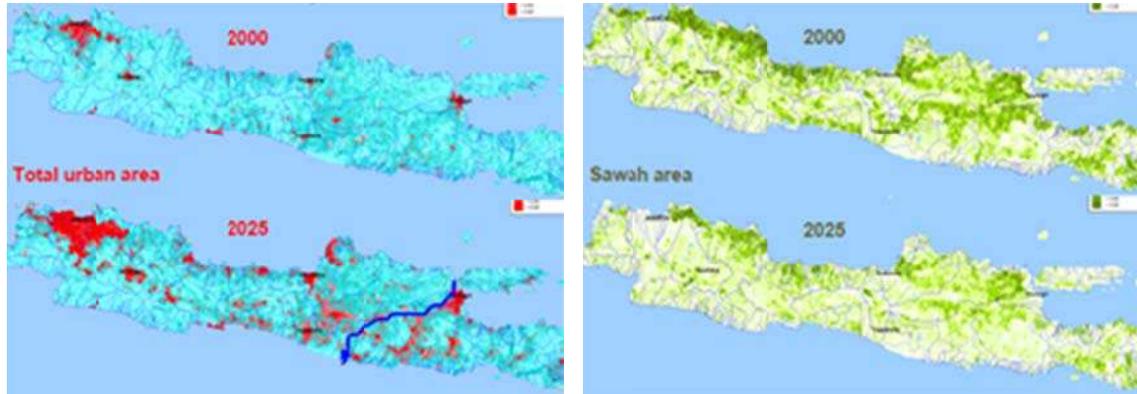


Figure 3-2: The growing urban areas and degrading of agricultural lands. (Source: Directorate General of Water Resources, Ministry of Public Work, 2014)

PLP2B is governed by the districts/municipalities and intergrated into RDTRs. In 2014, the Ministry of Agriculture reports that RTRW at the districts/municipalities formally delinates areas for LP2B about 1382 million hectares in Java island or 42.5% out of 3253 million hectares utilized as paddy fields. In all of 500 districts/municipalities only 107 districts/municipalities that delineates lands as LP2B in their RTRWs. Slow achievement to legitimate allocated land for LP2B indicates that economic administrative political configuration beyond land allocation is a stronger force determining land allocation.



Figure 3-3: Agricultural land conversion to large-scale housing threatens sustainable supply of food. (Source: Iwan Kustiwan, 2014)

In urban areas, the Ministry of Agriculture has promoted models of urban agricultural land uses through utilization of open spaces such as community gardens, roof top gardens, and vertical gardens. Urban agricultural system can be promoted through agricultural businesses such as seed productions, cultivation of ornamental plants, horticulture, fruits, small livestock, fisheries. Mass produced agricultural products can be promoted through marketing, agrotourism, and other services.

This model has been initiated by non-government organizations (NGOs) such as Indonesia gardening (*Indonesia berkebun*). Indonesia gardening is a community movement that utilize non productive urban land for food production and other productive agricultural activities. This movement has a network around many cities of Indonesia such as Banda Aceh, Bali, Balikpapan, Bandar Lampung, Bandung, Banjarmasin, Banten, Batam, Batang, Bekasi, Bogor, Depok, Fakfak, Jakarta, Jepara, Yogyakarta, Kudus, Madiun, Makassar, Malang, Medan, Padang, Palembang, Pontianak, Purwakarta, Semarang, Solo, Sukabumi, and Surabaya.

3.4 Addressing Urban Mobility Challenges

Urban mobility in cities of Indonesia has not been limited by a lack of infrastructure network. Widianono (2008) shows that road network in urban areas of Indonesia is about 15.000 km (5.2%) of the total road length, but is utilized by 80% of existing traffic volume. *Bottle-neck* urban roads cannot be overlooked. Road narrowing and conflict on road intersections contributes to such situations. For example, DKI Jakarta has road density ratio of 6%. Around 771 points of congestion in DKI Jakarta are recognized in 2010. This has led to high cost of congestion and estimated of total loss Rp 12.8 trillion/year (The Provincial Government of DKI Jakarta, 2012).



Figure 3-4: Congestion by high private cars ownership and the lack of adequate public transportation. (Source: Iwan Kustiwan, 2014)

Many urban travellers continue to use private vehicles in jam packed roads despite the prediction that the velocity continue to decrease. Policies from the national government do not help improve the efficiency of urban mobility either. Policies such as fuel subsidies and low cost private automobiles have become a source point of adversity that do not play well with the increase of urban mobility. Attempts to reduce urban mobility by limiting the use of private vehicles have been promoted. Policies such as increased amount of downpayment for car ownership to 30% as Bank of Indonesia Circular Letter No. 14/10/DPNP date 15 March 2012. Although the policy is aimed at protecting exchange reserves. This is expected to help reduce the desire to own cars. Other policy is progressive tax for those who own more than one private vehicle. Law no. 28/2009 on local taxes and levies allow for local governments to determine the progressive tax on vehicle ownership. The provincial government of DKI Jakarta has imposed such tax on 3rd January 2011.

At the same time, efforts to accommodate urban mobility is by supporting the use of mass transportation for urban commuting. Cities of Indonesia slowly begin to involve in initiation of mass rapid transportation (MRT) such as monorails, and bus rapid transportation (BRT). Cities such as Bandung, Surabaya, Yogyakarta and Jakarta plan to introduce MRT. Bandung city plans to introduce 12 km of MRT connecting the north and south sides of the cities. Yogyakarta plans to develop 30-40 km circulating the city and connect to Prambanan areas. Surabaya also plans to build 110 km that will connect this city to other surrounding cities in East Java. DKI Jakarta plans to build MRT that connect its core cities with surrounding cities such as Bogor, Depok, Tangerang, and Bekasi. In general, as urban expansion happens, MRT accommodate the connection between these core cities.

On the other hand, BRT which require less capital to invest, has expanded to many cities of Indonesia such as Jakarta, Bali, Bandar Lampung, Semarang, Yogyakarta and Bandung. Jakarta has 15 corridors that serves its sub cores as well as outer cities (Bekasi). In Bali, BRT serves Denpasar and its surrounding core areas (Badung, Gianyar, and Tabanan). Yogyakarta has BRT that serves Kartamantul (Yogyakarta, Sleman and Bantul). Only in Bandar Lampung, BRT serves in the internal parts of the city.

Inter city urban mobility, especially inter island is facilitated through air transportation. Development and improvement of airports such as in Medan, Balikpapan and Makassar is expected to catch up with already high level of mobility. For example, in Medan, Kuala Namu international airport was built to replace the old one which has a capacity of 8.1 million passengers, and is integrated with the railway services. It only takes 35 minutes and 40 km to reach the city. In Makassar, the government expand the Sultan Hasanuddin airport to serve 8 million passengers and is integrated with railway lines as well. In Balikpapan, expansion of Sepinggan airport is implemented to accept 1.5 million passengers.

Urban mobility among cities are facilitated through railway services such as between Jakarta-Bandung-Cirebon in three hours. Expansion of double track railways in north part of Java island accelerate the services between Jakarta – Semarang and Surabaya. Next double

track expansion will be on the south side of Java island. Toll roads are also expanded with 9 new toll roads introduced until 2020.



Figure 3-5: Suramadu bridge connecting Java island and Madura island. (Source: Fakultas Matematika, Institut Teknologi Surabaya, 2009)

Other attempts to ease inter city mobility especially when located inter island is expedite inter island bridges and port development. Suramadu bridge that connect east part of Java island and Madura island is to ensure that mobility can benefit good and service flows among islands.

3.5 Improving Technical Capacity to Plan and Manage Cities

Technical consideration in Spatial Management in Indonesia is administered by National Board of Spatial Management Coordination through Presidential Decision No. 4/2009. This *ad hoc* institution promotes the capacity building of government institutions at the national and local levels, to manage spatial plans. Through the Decision of the Ministry of Home Affairs No 50/2009, at the provincial and district/municipality levels, local board of Spatial Management Coordinations are created in order to promote awareness and understanding on spatial plans management at the local levels.

The capacity to monitor the implementation of spatial plans is mandated by the Law 26/2007, through investigating civil servant (*Penyidik Pegawai Negeri Sipil/ PPNS*). PPNS is in charged to investigate criminal infringement in Spatial Management. Currently the number of available PPNS to catch up with the implementation of Spatial plans is in short supply. The priority is not yet on the monitoring of spatial plans in districts/municipalities of Indonesia.

For metropolitan cities, especially in dealing with urban expansion, there has been established management agencies that support coordination among municipalities and districts to develop their areas. In Yogyakarta there is a joint secretariate to manage metropolitan region of Yogyakarta, Sleman and Bantul (*Sekber Kartamantul*). Sekber Kartamantul has been able to manage a joint operation of final waste disposal locations utilized by the three governments. In DKI Jakarta, there is Coordinating Board (BKSP Jabotabek) to manage urban expansion between DKI Jakarta, West Java and Banten. The oldest joint board has not shown much exemplary performance. The expectation to be a joint coordinating body was weakened by the different priorities put forward by each municipalities/province. The position of BKSP as a non autonomous body was seen as the major cause of refusal to coordination between governments. Leadership roles either arose from the governments or from the NGOs push the agenda toward such joint cooperation and operations. Furthermore, local autonomy when ascertained as self centered interests without looking at interdependence on other regions, such coordinating bodies will not play major parts.

Aside from local planning boards (Bappeda) acting as the leading institutions in Spatial Management, at civil servants can specialize themselves as Planning Functional Personnel (*Jabatan Fungsional Perencana/JFP*) whose main occupation is to engage in development planning including spatial planning at the national and local levels.

IV. Environment and Urbanization

4.1 Expansion of urban areas and consummation of the environment

In 2010, urbanization level has brought in about half of the population to live in cities of Indonesia. The World Bank has claimed that urbanization level at the world scale was the invention of 21st century. The experiences of having more than half of the people living in urban areas have been recognized by the provinces of DKI Jakarta, DI Yogyakarta, Banten, West Java, East Kalimantan and Bali which have an urbanization level of more than 60%, and makes up about 60 million population.

As urban population increase, not all of them reside in the administratively defined urban areas. The land size that makes up the administratively defined urban areas is more or less stagnant. Since 2010, there are 99 urban governments or municipalities that cover around 33.971 km² or 2% of total land size of the country. Some urban migrants reside in areas of non municipalities status, including some industrial zones, or urban kecamatan centers. Kabupaten Tangerang, Bandung, Bandung Barat, Bekasi or Bogor are non urban governments whose size of urban areas continue to increase, indicated by the density of the population that is similar to or higher than, municipality of Metro in Lampung. There are also so called peri-urban regions, rural areas surrounding cities that become the urban settlement, usually is a part of the defined metropolitan regions, whose density has not reached that of the urban areas but urban density found as enclaves have. For example, in the province of West Java, 35% of population lives in two metropolitan regions of Jabodetabek and Bandung.

Expansion of urban areas is no doubt seen as a consequence of increasing number of urban population, either through the migration of the population, or transformation of rural areas to be urban. Expansion has seen not only in metropolitan cities, but also in large cities, especially in the case of outside of Java or Bali islands. Urban settlement has thrived, facilitated by organized housing development either through private sector or government subsidized organizations in the rural areas whose land price is more affordable. Conversion of rural land to urban areas have become more rampant with 100.000 ha/year converted, less than the capacity to convert into agricultural land (Maliara, 2013) (Ministry of Agriculture, 2014). Mostly the conversion is for urban settlement or industrial areas. In urban areas where there remains agricultural land, the conversion rate is even faster, accelerated by the fact the areas is no longer designated as rural per-se² (Ningrum, Primadianthi, Munthe, Dewi, Maulana, & Dediarta, 2011). Agricultural land especially for paddy fields are preferable especially for their flat areas and often has developed infrastructure.

²The city of Medan has experienced the conversion of agriculture land 36% (2001-2008) or around 2288 ha, which is equal to 19.205 million tons of unhulled rice a decrease of 51% of the total production.

Land conversion also takes place from forestry land, mainly used for conservation, to be used for plantation (either for palm oil or coal mining), and for energy sources. While conversion of wet paddy fields are encouraged, conversion for energy sources is a delicate topic. In one hand, energy demand requires new sources of energy, but at the expense of increasing air pollution that would reduce the existence of conservation areas. Such conversion, indeed, has reached a massive level. The international communities, though UNFCCC in the latest report (2014), pinpoints the position of Indonesia in terms of forest land conversion as a source of climate change.

Alarmed by the fast paced conversion to urban areas, National Law No 41/2009 was introduced to protect valuable agricultural lands, to ensure that these lands are utilized for agricultural activities. Such Law to a degree has limited the easy access to agricultural land conversion. Prime agricultural land is preserved for agricultural uses, despite the fact that the ownerships change hands. A draft Law on protecting the farmers is currently under review to further protect the stakeholders who benefit from the agricultural land.

On the hand, there is not yet Law on forest land conversion. Land used for forestry continue to be under the Law 41/1999 on Forestry. Regulation on forest land conversion is established by the government, instead enacted by the legislature. There are more issues on forest land conversion that lead to charge of corruption in forestry land conversion. Furthermore, as more development especially for large scale infrastructure such as powerplants, geothermal sources, dams, ports, airports often choose forest land that has less of individual ownerships. The planners do not have to deal with complicated, mazed like bureaucratic process of land transfers of ownerships.

Urbanized area has become the hotspots for energy consumptions, and CO₂ emission³. Research on climate change and how cities can contribute to reduce the impact of climate change, has some scholars indicate the needs for cities to reinvent itself that goes well beyond the call of national level governments. An intensive, multi years efforts to deal with pollution issues, basic needs requirement and better land use practice have been at the heart of city development. This is towards the rearrangement of urban areas that can better tackle problems related to urban sustainability.

4.2 Reducing traffic congestion and improvement of mass transportation

In Indonesia, public transportation in urban areas, including in municipalities, for a long time, relies on privately owned vehicles or private companies, operating as public transportation. Often for short medium distance, vehicles can carry less than 15 people but has frequent trips. For a long distance, more passengers can fit into mass vehicles or buses. With limited number of passengers served, the state of public transportation in urban areas has not reached to a level of massive transportation. For land based transportation,

³At the World scale, cities only take up 2% of the earth's surface, they account for 50% of the human population, 75% of its energy consumption and 80% of CO₂ emissions(Smedley 2013).

Transportation Section (*Dinas Perhubungan*) is the main government arms at the local level that locally deals with mass transportation including routes, mode of transportation, capacities as well as hour operations. In municipalities of Indonesia, Dinas Perhubungan or the transportation department form alliances withland based transportation operator organizations, (*Organda*), that help define the routes, the operators, hour of services. Organda also communicates with the government regarding tariff charged to the public, as these tariff decision is made by the legislature after the recommendation of the executive governments. Processes toward decision either to increase tariff has been based on political decisions, often at the expense on increased burdens to the operator, or to the subsidy of the governments. With less clear understanding on costs of operating vehicles for mass transportation, including the cost of higher gasoline price, the state of mass transportation vehicles dilapitate, and is often dangerously operated. In the case of DKI Jakarta, since other choices of other types of vehicles have not been made available, such vehicles continue to be utilized.

With such dire situation, public transportation in cities of Indonesia often falls into a perception that such transportation is used only for poor people. Surveys on some large and medium cities, have shown that despite such condition, public transportation serves the need of those who do not own motorized vehicles such as children going to schools, mother going to the markets.

Public transportation that closely resemble mass transportation is introduced through government owned company, Damri. Damri vehicles have the capacity up to 40 passengers, begin to operate in areas whose demand for public transportation emerge but do not yet attract private sectors to participate. Lately, Damri offers mass transportation between cities, or cities and hub of transportation such as ports or airports. Damri also offer long distance within cities services such as one in Bandung.

Water transportation for mass, is also slow to develop. Water based public transportation is purely a type of privately run services. There are less clear regulation on water based mass transportation. Cities that runs rivers around it such as Palembang, Banjarmasin, Palangkaraya, has a poor connection between land and water transportation. Not only that water based public transportation is not integrated into land based public transportation, water based public transportation is considered more expensive and cannot run more frequen tly than land based. Water based public transportation, when require higher investment, is operated by ASDP, a state-owned company. ASDP usually operates in sea areas rather than rivers.

As of today, there is no policies or strategies that dedicate toward mass transportation in urban areas. Experiences on building mass transportation in urban areas have been the case study. DKI Jakarta will be the first experience of which the central government will derive from and develop policies that can help other cities to create their own mass transportation.

As the cities become richer, there more vehicles owned by its residents. At the provincial level, the more urbanized the province, the more people own personal vehicles. The ownership reached about 80%. On the other hand, the least urbanized provinces also mean that personal motorized vehicle ownership is low. It can be as low as 25% of the whole population in the province of Papua. Recognizing at the provinces which are more archipelagic or own water and not only land mass, the ownership of personal vehicles continue to be low despite the fact that the province becomes more urbanized.

4.3 Reducing air Pollution

The more urbanized the area is connected to the higher the level of air pollution. Congestion from urban transportation is often blamed as the major sources. The Ministry of Environment identifies that urban transportation contributes to 50 to 70 percent of the total emissions of fine particles and 75 percent of total harmful greenhouse-gas emissions to health (Ekuatorial, 2014). In Semarang during peak hours, the concentration of Pb and CO are significantly higher (Widiani, Purwanto, & Sulisnanto, 2008). It leads to dying plants, soil not capable to hold plants. With the absence of policies directing towards promoting mass transportation in urban areas, congestion or traffic jam becomes the fixture of urban areas of Indonesia regardless of the size of the population.

However air pollution can also increase from urban land cover, such as more paved areas or higher number of building using glass fixtures and less areas dedicated to green urban space. The combination of these and urban land uses that promote densification without much green open spaces infilled, raise the green house effect. Typically, temperature of high density urban areas raise between 1- 5°C as a result of green house effects. With the combination of traffic congestion, increased size of built up areas and limited size of green open space, green house effects are seen as having devastating effect for urban public health and towards energy demands.

In the coastal city of Surabaya, the temperature level during the day reaches about 34°C which is hot and trigger higher energy demand, not to mention lower level of urban productivity. Survey did by BPS on the desire of population to turn on the AC at the temperature of 25 °C or higher, shows that provinces that have mining resources have the tendency to turn more often. Even DKI Jakarta is not considered high at the number of population who have such desire. At the municipality level, the higher the income of its population combined with the location of the cities such as in coastal areas, the higher the desire to turn on the air condition.

Taking the clue from the worsening situation of green house effect and level of densification that potentially chock the living of urban residents, from the point of view of land use planning, through the Law no 26/2007 on Spatial management, municipalities are required to allocate minimal of 30% land for green open space (RTH). Since then, efforts to increase the land size dedicated to green open spaces (RTH) have been mobilized and

promoted. Based on the evaluation by the Ministry of Public Work, the average proportion of green open space to the total land size in cities of Indonesia is only 14% (Muliarta, 2012). For some higher density municipalities, this requirement is a challenge. Bandung, Depok, Bogor, Bekasi, Tangerang, Tangerang Selatan, DKI Jakarta can only fulfill its green open space less than ten percent, far cry from 30% that is required. In 2008, DKI Jakarta only acquires 5 hectares of land for RTH. For cities located outside of Java or medium and small cities, the proportion of RTH to the city size has been better. Some exceptions are found in cities such as Payakumbuh, Balikpapan which have a proportion of RTH, reaching 50%.

Beyond the proportion of RTH, the functions of RTH have not been discussed much in the RTRWs or city functions. The arrangement of green open space, as well as its function is intended to be used or to be conserved for are another step in the right direction for promoting RTH. Green open space is not only that it promotes interaction between residents and nature in urban areas, but nature that can promote the emergence of urban animals, urban forestry and protection of natural resources including water sources. This will help with the negative effect of green house effects.

Car free days promoted in many cities is aimed at to promote awareness among car users while also reducing air pollution, although not significantly. Promoted by the local Environmental Agency, car free days gain popularities not only in large cities but also in small cities. The area used for car free days is usually main street of the cities which change functions to be open spaces for residents to engage in sport, or entertaining activities, fit into family programs.



Figure 4-1: Campaigning for “car free day” in Bandung. (Photo: Fran Ari Prasetyo, 2014)

Of the 30% of green open space, about 10% have to be provided for by urban residents including private sectors. Many municipalities have not taken specific policies or strategies to promote private initiatives for green open spaces. Strategies for example, to

promote the unpaved backyard or frontyard. But they promote the use of biopori or small scale retention ponds, which is not aimed at promoting green open space.

Reducing the use of motorized vehicles can be a solution that are still in infancy in urban policies towards reducing air pollution. The use of bicycles as mode of transportation in urban areas is initiated by the urban communities. Organization such as Bike to Work promote the use of bikes for daily usage, not only for recreation purposes. Municipalities itself Some cities such as Surabaya, Yogyakarta allocate their streets for bike lanes. Other cities such as Bandung, allocate bikelanes together with pedestrian lanes. Furthermore, government initiatives for promoting the use of non motorized vehicles has many approaches. The mayor of Bandung, every Friday bikes to the office. The government officials of DKI Jakarta and of the Depok municipality have to leave behind their motorized vehicles once a week.

Initiated by urban communities, is the sharing economy in public transportation. Using the apps specifically for getting a ride with friends or colleagues, or even strangers is one way to overcome the stress from traffic congestion and to reduce the effect of pollution.

Another national program intended to reduce the dependence on the fossil fuel, is to convert to natural gas fuel (*Bahan Bakar Gas* or BBG). While the program is not intended to reduce air pollution, more than to reduce energy subsidy, it is one of the programs that help with reducing air pollution. This program is not cheap, as the conversion requires adjustment in gas station, engines, converter kit, as well as the quality of services in distribution. This program is initiated in cities such as Jakarta, Bandung, Surabaya, Cirebon, Bogor, and Palembang, participated by private or government owned vehicles. In Jakarta, some BRT uses gas fuel as their main vehicles.

Initiation in green buildings and green infrastructure begin to take shapes. It is however slow to be adopted at the local level. As it requires more than policies related but also the supply of materials and knowledge promoted.

The other important effort to reduce air pollution is in fact related to solid waste management. Landfill of solid waste is another source of air pollution (CH₄ or CO₂). Reducing the volume of solid waste transported to the final disposal is not only prolong the lifetime of the landfill location, but also reduce the possibility of air pollution. Law 18/2009 on waste management especially promotes the solid waste reduction at the household as well as temporary locations. Survey done by BPS on the willingness of households to separate their solid waste at the provincial levels, it shows that the highest percentage of household to engage in separation is 30%. The lowest (15%) is located in DKI Jakarta, Maluku dan Sulawesi Tengah. Thus the willingness to separate solid waste do not have correlation with the more urbanized the provinces.

Many of these programs such as car free days, conversion to gas fuel are considered symbolic. They do not directly represent the need to expand such services or permanently

transform urban lifestyle that improves air pollution in urban areas. The use of solar panel based for urban lightings are another symbolic efforts to show off what have been done to be energy efficient and environmentally friendly, but not yet to extend such good deeds to the massive transformation.

4.4 Disaster Risk Management

As a country located in the Ring of Fire, Indonesia has many incidence of natural disasters. Succesfull experiences on Rehabilitation and Reconstruction in Aceh 2005-2008 and increasing incidence of disaster in the country, leads to the creation of Law No 24/2007 on Disaster Management. Such Law is designed to expand the understanding, practical knowledge and action on disaster risk reduction and its management. The highlight is on the increasing capacity of local governments to take public action in the event of disaster, and initiate a process of prevention, preparedness, rehabilitation and reconstruction. This approach is a departure from the previous ones which emphasize on the emergency management.

Awareness of disaster management has increased as a result. Almost all municipalities in Indonesia has local disaster management agencies especially to deal with local scale and more frequent disasters such as fire, floods and landslides.

Other types of disasters such as volcano eruption, earthquakes and tsunami are monitored through national level agencies. The central government also have allocated more funding for National Meteorological, Geophysics and Volcanoe agency (BMKG) in order to have a capacity to monitor at the local levels.

About 96% of disaster types take place in Indonesia is *hydro-meteorology*, such as floods, landslides, storms and tidal waves. With increasing level of urbanization, during the month of January 2013, BNPB notes that there are 36 times of floods which cause 61 died, and 110.129 have to move houses. While there are 25 incidents of landslides that cause 40 died, 42 incidents of storm that causes three died, 5200 homes destroyed, several public facilities destroyed as well.

It is not the hazards that cause hardships but the high level of urbanization has given people no choice but people living in disaster prone areas, especially in a high density area. Not only that, the preparedness of the communities when affected by disaster remains low. Added to this is the infrastructure needed for evacuation, for emergency management. All these add to the increased risk toward disaster.

The ability and the capacity to respond to disaster incidences have improved. This is not only because of the local government capacity, but also the involvement of the communities, NGOs and even private sectors. Such non governmental entity plays a major roles in mobilizing the resources, capacity and knowledge toward the incidence of disasters. Semi NGO such as Indonesian Red Cross, National Search and Rescue Agency also plays

aparts. Religious organizations are more involved in such humanitarian activities with no affiliation towards victims of disasters.

At the national level, BNPB has introduced disaster preparedness as well as emergency management programs to the local level. Between 2012 and 2014, about Rp 180 billion has been used to help with the local governments to deal with disasters. BNPB also develops contingency plans for floods and landslides at the national level, and coordinate with other ministries and boards to engage in disaster risk reduction.

Policies on disaster management in the period of 2010-2014 are:

- a. Implementation of disaster management needs to be well planned, guided, coordinated, integrated, comprehensive, and accountable;
- b. Awareness towards understanding, capacity, and preparedness on disaster management through emergency management;
- c. Completion of emergency management in post disaster areas in quick, accurate, effective and coordinative manners;
- d. Completion of rehabilitating physical and non physical infrastructure in post disaster areas in integrative and comprehensive manner.

In many cities, disaster preparedness towards floods has been introduced through constructing infiltration wells and *biopori*. The result is still limited. Other efforts such as *Rain Water Harvesting* (RWH) in each household are also introduced in flood prone areas. These concepts have not been introduced *en-masse* with consideration that such appropriate technology requires contextualization of the movement. This movement is not only to reduce flood risk but also to ensure clean water supply in urban areas.

4.5 Addressing Climate Change in Urban Areas

For Indonesia, activities that contribute towards climate change is in forestry sector, especially on forest conversion for non conservation uses. However, with more population live in urban areas, cities potentially become the second sources of climate change that contribute towards increasing volume of CO₂ in the atmosphere.

The latest report (ARC5) from UNFCCC (2014) shows that even when cities are located in 3% of land mass, their activities can contribute toward changing the emission targets. At the world scale, urban area consumes about 75% of energy demand. That demand has to be sourced from rural areas.

Many cities are encouraged to initiate their own strategies and actions towards reducing the emission. Strategies promoted includes the initiation to develop green building codes for offices. Some households are encouraged to use solar panel as a source of electricity. However many initiatives are oriented itself toward community based initiatives using simple technologies. Less is involved that include innovation in technology that improve even change the lifestyle of the communities. The reluctance of government to

involve in the technology breakthrough in reducing emission. This is despite the fact the national government commit to reduce target emission of 26% by 2020.

Efforts at the city level to mobilize emission reduction is promoted through National Action Plan on Adaptation of Climate Change (2014) or RAN API. Targets on cities are on strategies to increase the use of mass transportation, reducing solid waste. This is not only mainstream in terms of the choices for urban areas but limit the arrangement of built up areas that is seen as efficient and effective to reduce emission level.

The government of Indonesia is seen as fast in adapting international commitment on climate change. Since 2007, there is already National action plan on Mitigation and Adaptation on Climate Change, following National Action Plan on Green House Effects. Such action plan at the national level is to be responded by creating the action plans at the local level. It was not as much promoted. The latest RAN API 2014 is promoted so that the local governments is to develop local version of the action plans. This is especially for cities that will be affected by climate changes. These cities are coastal cities, high density cities, disaster prone cities.

If cities are expected to be innovative and take more advanced steps than the rest of the countries, it is the municipalities that should be a leader in cutting emissions. Creating a so called low- or zero-emission cities -- among the only ways to avoid dangerous climate change if the objective is to cut GHG emissions 80 percent below 1990 levels by 2050, the target set by the Intergovernmental Panel on Climate Change -- more revolutionary changes are needed.

While deforestation in Indonesia is considered as the leading cause of climate change globally, Indonesia itself is affected by climate change through variation of rainfall, and geographical elevation, rather than from temperature changes. Rainfall is a major climate parameter in tropical countries such as Indonesia. While temperature parameters fluctuate at monthly variation of 1°Celsius each month, lower than daily variation of around 5° – 7°Celsius. Spatial temperature variations are more influenced by elevation, with the proposition that temperature declines by 1° C for each 100 meter of elevation.

Average temperature increase in large cities of Indonesia such as Jakarta can be higher than other areas of Indonesia. The phenomenon of urban heat island (UHI) takes place that influence the average temperature of the cities. During the three months of June-July- August (JJA) UHI in DKI Jakarta increase by about 2° C in the last 50 years.

The oceans in Indonesia, geographically affect the climate and temperature in Indonesia. Indonesia is the only country located in the encountering between two oceans: Pacific and Indian. Indonesian throughflow (*Arus Lintas Indonesia/Arlindo*) is a part of the world throughflow that connect Pacific ocean to the Indian ocean through Indonesian sea. Indonesian throughflow is an important part of the world climate change, which bring warm

air from Pacific ocean to the Indian ocean via Makassar strait, Lombok strait, Timor sea, Ombai Strait and Lifamatola.

On the west side of Indonesia, east Indian oceans (close to west side of Sumatera island, South side of Java and Nusa Tenggara islands) is affected by ocean activities in Indian ocean or known as Indian Ocean Dipole (IOD). The difference between sea surface temperature in Indian Ocean and sea surface temperature in the west side of Sumatera island indicates such phenomena. If the index reaches negative (below minus one) it means that temperature in the middle of Indian Ocean is warmer than in western side of Sumatera island, which indicates that the west side of Indonesia will face drought. On the other hand, if it is not negative that means high rainfall will reach the west side of Indonesia.

Floods can be categorized as the impact of variation of temperature which causes problems in large cities of Indonesia, such as coastal cities located in north side of Java island. In these cities, floods are often caused by combination of factors such as rainfall between upstream and downstream rivers and sea level rise. Long term sea level rise as a result of global warming and land subsidence also contribute to floods in coastal areas. The average growth of sea level rise in coastal and marine area of Indonesia is between 0.73 – 0.76 cm annually. The coastal area vulnerable to sea level rise is located in south Kalimantan, South Sulawesi, and small islands.

Coastal areas is also vulnerable to erosion and accretion, indicated by sloping beaches, high vulnerability level of beach geomorphological factor and high tidal wave. The example of this is in coastal areas of Banten – DKI Jakarta – West Java, parts of Central Java, Surabaya, and Seribu archipelago, delta of Musi river and coastal area of North Sumatera, part of coastal area of West Kalimantan and coastal area of Merauke.

V. Urban Governance and Legislation

5.1 Improving Urban Legislations

The Amended constitution which was a reflection of the reform of 1998, was finished in 2002. It clearly states that Indonesia is a nation based on the rule of law. An assembly of legal orders would be the basis for the nation's governance. The nation, thus, initiates the creation and replacement of regulations so as to represent new values and norms embodied in the amended constitution. Initiatives to propose regulations come from the government or the legislature. But the communities can express opinions that inspire the government or the legislature to propose regulations.

Indonesia follows the regulation hierarchy of which the contents of any regulations created at the lower levels of the governments, cannot contradict those of the higher levels. While some regulations may be needed to attain with local situations, conformity with the regulations at the higher levels are required. At the highest level, dispute with laws can be tried in the constitutional court.

In governing urbanization, the regulations validate four dimensions which are: 1) legislations on local management institutions; 2) laws on local fiscal capacities; 3) laws on management of natural and human resources; 4) laws on demography and society.

(1) Laws that determine the governance in Indonesia is the Law on local governments. Constructing local governments in Indonesia than can govern their divergent geographical conditions and varied local histories is complex. The archipelagic country has a concentrated population (55% of the total population) located in Java island (5% of the country size) with extensive culture and environments to be unified through political, law, administrative systems.

Before the amended constitution was installed, local governments of Indonesia were divided into large or small localities, and its governments roles were determined by the previous law. The Law No 5/1974 on local governments emphasized the roles of the local governments to implement development plans prepared by the national government. The heads of the local governments were appointed by the higher level of governments based on suggestion from the local legislature. The local legislative members were directly elected, but staged by executives at the highest level. After 1998, when the reform took place, the amended constitution defines that Indonesia is divided into provinces, and provinces are divided into districts and municipalities. Local governments at the provincial, district and municipal levels and manage their own affairs based on principles of autonomy and co-

administration⁴. Local governments execute autonomy at the broadest range except for affairs related to national interests, defined by law.

This amended constitution is derived into the Law No. 32/2004 on local governments that delineate affairs related to national interests who are: foreign affairs, national security and defense, judicial affairs, monetary and fiscal responsibility, and religious affairs. Other affairs are the domains of the local governments.

The head of the local governments and members of local legislature will be elected democratically by the people. This shifts the fundamental principles of governing at the local level. Changing from centralistic style of governance to the decentralized mode leads to reliance on the self-managed, autonomous governing at the local level. At the transition phase, such new reliance produces chaotic, tumultuous governing processes, especially in order to find solutions. On the positive side, decentralization and democracy have generated local innovation and creativity in local governance and public services.

(2) laws on local fiscal capacity are derived from the amended constitution on local governance and their finance. The Law No. 33/2004 on balance between local finance defines actual local finance and transfer of fund from the national to the local governments in the form of general fund allocation (DAU), specific fund allocation (DAK), and revenue sharing fund (DBH). The management of local finance has been used as a national policy instrument on urban management. The national government continuously develops criteria and guidance on general fund allocation, and specific fund allocation. The management of revenue sharing fund is also continually adjusted in order to increase the local fiscal capacity. Since then, the Law No 28/2009 on Local Taxes and Levies is intended to expand the sources of local taxes and levies.

(3) laws that comprehensively define the spatial, geographical allocation of activities is the Law No. 27/2006 on Spatial Management. This law is ratified to regulate among others an article in the amended constitution that states: “soil, water and natural wealth contained underneath will be controlled by the state and utilized to the greatest for the prosperity of society”. This article is not amended, but has been a part of the original constitution. In the meantime, the value of decentralization which is amended was not included in this original constitution. Thus, even when the Law no 27/2006 was meant to replace the previous Law no 24/1992, the basic principles of hierarchical top down planning remains. This new Law follows the principles of territorial decentralization. Other Laws enacted, such as the Law No. 7/2004 on Water, the Law No. 38/2004 on Road, the Law No. 28/2002 on Building Construction, and the Law No 24/2007 on Disaster Management, elaborates on the specific issues of physical matters.

⁴Co-administration or Medebewind (in Dutch language) is one form of autonomy in which the autonomy remains at the higher level of government while the administration of the autonomy is executed at the lower level.

(4) laws on Population and Society. This law is treated the national government's instrument to help the local government providing improved services and protection to the society. Such laws include the Law No 52/2009 on Population Development and Family Planning, The Law No 25//2009 on Public Services, Law No 24/2007 on Disaster management.

There is no specific law for urban management, partly because urbanization is not explicitly regulated in the constitution. The law no 32/2004 on Local Government, and the law No 26/2007 on Spatial Management mention specific articles on urbanized areas, but do not require specific regulating efforts.

Ratification of Government Regulation No.34/2009 on Guidelines for Management of Urban Areas is a follow up of the Law on Spatial Management and on Local Government. This Government Regulation adopts the definition of urban areas as stated in the law on Spatial Management. In detail, urban area is defined as areas whose main economic activities is non agriculture, with functional arrangement as urban settlement, distribution center for government services, social services and economic activities (see General Rules). This Government regulation also adopts Article No 199 in the Law No 32/2004 on Local Governments that determine urban areas can be in a form of:

- a) Cities as autonomous region;
- b) A part of a district that has urban characteristics;
- c) A part of two or more regions whose boundaries creates a urban characteristics.

The government regulation establishes that formation of urban areas as stated in a) is legalized by the Law. Formation of urban areas as stated in b) is legalized though district regulation. Formation of urban areas as stated in c) is legalized by district regulations. Local governments are allowed to form a urban management institution that manage portion of their areas that become urban. The institution can develop urban plans, implement development in the urban areas.

This government regulation however, has not been used as the umbrella law in order to manage urban development in Indonesia. Instead, a draft of the Law on Urban development with comprehensive approaches is being proposed. Laws that affect the management of urban development can be found in the appendix.

5.2 Decentralisation and the strengthening of local authorities

Since the reform of 1998, democracy and decentralization at the local level strengthens the governing of society. Social dynamics and political processes feed into evolving forms of democracy. In the last 15 years, Indonesia has executed four direct elections. Installation of new heads of governments has been smoothly transitioned. Since 2005, local leaders such as governors, head of districts and mayors have been directly elected by people. This experience changes political culture and governance in Indonesia. Transforming society through decentralization has been conducted in a peaceful manner

without political turmoil that destabilizes the nation. This is such an accomplishment for the Nation, in comparison to other nations whose transitions to democracy has been halted by instability and chaos and social upheaval.

In 2014, Indonesians engaged in direct elections for the fourth time since reform of 1998. On April the 9th 2014, about 139 million people directly elects members of parliaments at the national, provincial and district/municipal levels. In July, the 9th, 2014 another direct election was conducted to choose the new president.



Figure 5-1: People casting votes in 2014 Presidential election (source: www.setkab.go.id)

The Law No 32/2004 on local governments divides mandates between national, provincial and local governments which were based on the principles of rights and duties of each level of governments based on three criteria: externalities, efficiency and accountability. At the provincial and district levels, the mandates are divided into two categories: obligatory and optional. The obligatory mandate is related to basic services to the society, while the optional mandate is a mandate based on excelled natural resources of each locality.

Two government regulations are installed to guide decentralization and promote democracy in local governance, of which Government Regulation No 38/2007 that specify obligatory and optional mandates for provinces and districts/municipalities and Government Regulation No 41/2007 that specify democratic processes to form local government organizations based on local needs and capacity such as population size, land size and local budget capacity. Up to today there is no identical government organizational structures imposed to the local levels.

The model of governance evolves as facts and realities on managing localities got more complicated. Dynamics of urbanization patterns are high and governing it requires specific skills and organizational structure that support nature of urbanization. A draft law on Urbanization is currently under review, especially for provincial and district governments to manage urban areas within their administrative boundaries. Some urban areas are located in

two districts that require the involvement of higher level of government which is the province to manage such areas. Other challenges emerge as the form of cooperation agencies such as BKSP Jabodetabek has to manage 20 million populations with limited mandates from the autonomous governments.

Democracy and decentralization have increased awareness of the public regarding their rights by pressuring local government for better urban public services. Law on Minimum Service Standards (SPM) for each urban service sector is promoted so that each sector creates its own SPM. The Law on Transparency of Public Information and the formation of Ombudsman commission are other institutions that deal with public services provided for by the government. Local authorities, thus, are encouraged to improve, strengthen, and revive their capacity as public service providers.

Other achievement in public sector governance is the introduction of non-governmentactor’s involvement. In general, the involvement of non-government stakeholders is limited to discussion, in other capacity; their involvement goes beyond decision making and taking action. In some large cities, the emergence of new towns indicates direct involvement of private sector in housing and settlement development.

Bureaucracy reform (or administration reform) is another championing policy that systematically and comprehensively positions human resources as key resources in public services. The introduction of fit and proper test or open public hearing for public servants is another type of reform. Some local governments such as DKI Jakarta, Bandung, as well as government institutions such as ministries introduces auction for key positions in governments.



Figure 5-2: Training of local government civil servants (source: www.solopos.com)

Opportunities for enrolling in higher education such as master's degree, training for capacity building are open not only to technical staffs but also to heads of governments (mayors) such as not for profit institution sponsored training to Kennedy School of Public Policy, Harvard University. At the national level, strengthening local governments become the national agenda in which Bappenas select and allow public servants to get degree granting or non-degree professional development training, either at the local universities or abroad. Scholarships for degree granting education for local government employees are also provided for by the local governments themselves, either to local universities or abroad.

Institutional revival is also one of the targets for improving public services, which is executed through working standards, strict monitoring and evaluation. Guidelines, technical guides, resource books, and Norms, Standards, Guidelines and Manuals (*Norma, Standar, Pedoman, Manual/NSPM*) are introduced to help local government bureaucrats implement programs and projects in their regions.

Another important achievement is fiscal decentralization by transforming mandate to assess tax base to the local governments, as enacted in the Law no 33/2004 on Balanced allocation of Finance between National and Local governments and the Law no. 28/2009 on local taxes and levies. Local governments have more mandates to managing financial sources, and by introducing limited earmarking scheme (10%) to revenues from transportation such as automobile tax, tax on transfer of car ownership, engine test for public transportation. Such decentralization increases the basis for local governments to serve the public as appropriately as possible, especially in the transportation sector.

5.3 Improving participation and human rights in urban development

Reform of 1998 opens opportunities for public participation in planning, budgeting, and implementation of urban development. Such participation can be in the form of voicing their concerns, critiques in public decision making, monitoring of public services and project implementation, and direct resource contribution in urban development. Rules of law are laid out for public participation in development.



Figure 5-3:PNPM activities (Source: Directorate General of Human Settlements)

Several development projects have been successful with increased public participation such as National Program of Community empowerment (*Program Nasional Pemberdayaan Masyarakat/PNPM*).

The constitution of Indonesia of 1945 affirms explicitly that human rights is the right to exercise liberty, engage in associations, choose religions, defend the nation, and obtain education. As the constitution is amended, the ten new articles on human rights are added in chapter X article 28 A-28 J that relates to urban development. The state assures civil rights of its citizens to expand their potentials through fulfillment of basic needs, the right to live prosperous, live under the roof, gain access to habitable environment through services in health, education and the right to gain access to information. Principles of justice in law is also introduced by the laws, such as The Law No 39/1999 on Human Rights, the Law no 40/2008 on Elimination of race and ethnic discrimination, the Law no 26/2000 on human rights tribunals, and the Law No 16/2011 on law aids to low income groups.

For specific cases of human rights abuse, National commissions are formed, such as human rights commission, national commission of women rights, national commission on child protection as independent commissions with the aim to implement, analyze, research, counsel, monitor and mediate human rights cases. This effort gains appreciation and is supported by NGOs, community based organizations, nationally and internationally.

Openness of public information, improvement of democratic system, mass media involvement, and public participation has improved the implementation of these rights. Public participation on public policies and monitoring and evaluation on urban development are often executed by NGOs, civil organizations, social activists. This opens opportunities to participation of community resources in development, either through private sector or through nonprofit organizations, especially in housing and settlement development.

5.4 Improving urban security and community safety

Urbanization level added with unemployment level, have been indicated as contributing factors on increasing violence and crime in urban areas. Incidents of poverty, social disparities, human right abuse and other social issues intensify the incidents of crime and violence. In the period of 2010-2012 crime incident tends to fluctuate with a crime ratio per 100.000 population decline from 142 to 134 incidents. Policies on reducing crime and violence will not be adequate to tackle such crime and violence. Policies on crime prevention can deter from such crime to take place again.

Urban crime sometimes is triggered by opportunities to make use of uninhabited or vacant land. Areas with limited social interactions and dark during the night are often associated with illicit activities. Programs such as heritage preservation, *kampung* revitalization, and informal sector facilitation for night activities are some of the examples

where the local governments reduce such potential crime, at the same time enliven cities, such as Solo and Surabaya, with small scale entrepreneurs.

Several cases of crime and violence are accomplished by women, children, teenagers, and minority groups. Entering the reformation era of post-1998, horizontal social conflicts happen more frequently as an excess of a more open opportunities and civil liberty to voice opinions and needs. As the society's awareness improved, enactment of the law on transparency of public information, the law on online information, ability of police forces to manage the civil unrest, social conflicts and turmoil as a result of issues based on ethnicity, religions, race, and social groups (SARA) in some parts of Indonesia such as Poso, Ambon, Aceh and Papua in the last ten years can be deciphered peacefully through mediation and negotiation. Although, there is always security issues and terrorism networks imported from abroad that need extra attention.

Assurance on living peacefully or law protection on land ownership is one of the civil rights to gain safety and to protect themselves from displacement or other coercion. In Indonesia, the cases of coerced population displacement have declined. Dispute on land ownership, and land uses often went to courts. However, complex issues such as people living in land that they have no right to, especially in public land such as green space, river banks, railway lines, or at privately owned unused land, has been introduced to solutions related to housing provision. The understanding of slums or illegal occupation in Indonesia is not only serves by legal standing, but also by considering local socio cultural aspects. In some situation, the land has been occupied as long as twenty years without government or land owners taking them to court, even gain access to government sponsored urban services and pay property tax.



Figure 5-4: Slums upgrading program in Solo. (Source: Surakarta City Government)

Municipalities and mayors often make public decisions on the case by case basis, fittingly to the local social cultural situations. Dialogue and consensus building are preferred choices to mediate the problems such as experiences in Surabaya, Solo and DKI Jakarta. Regulation on local finance management prevents public funding utilized for illegal settlement located in state owned land. The municipality of Solo in 2007 manages to relocate illegal but flooded settlement through disaster grants. The municipality of Palembang finance slums along the river banks using such funding. The government of DKI Jakarta relocates residents surrounding Pluit dams to rental apartments (*rusunawa*). Solutions to these problems open eyes to best practices in urban innovation and urban governance that prioritize quality of urban services to its residents.

In the last decade, natural disaster in Indonesia has afflicted more areas with high magnitudes that result in death, building and infrastructure collapse. Disaster occurrence as a result of climate change such as floods, landslide, sea level rise tend to increase in coastal cities or settlement on critical lands. The geographical position of Indonesia in the Asia Pacific ring of fire, foster the government and the community to engage in disaster preparedness, prevention and disaster management. Learning from Aceh/Nias Reconstruction and Rehabilitation Program (Aceh/Nias BRR), the Indonesian government promotes mainstreaming of disaster risk reduction through the Law No 24/2007 on Disaster Management, followed by the creation of National and local Boards on Disaster Management, introduction of emergency management, building construction management, community based institutions and governance of disaster management. Experiences in Yogyakarta in post volcanic eruption is a good example for cooperation between stakeholders that produce community based solutions (in the program called *Rekompak*). The *Rekompak* model has been praised by international observers is then replicated in other districts and cities.



Figure 5-5: Merapi Rekompakpost-volcanic eruption resettlement. (Source: rekompakciptakarya.org)

Low income groups are considered to be the most vulnerable group in disaster incidents. They often live in disaster prone areas and has limited access to resources that reduce their disaster risk. With limited resources, their capacity to engage in disaster management is minimal. Thus there is a need to create policies and action plans that reduce vulnerability and risk to these groups as a part of reducing urban poverty.

5.5 Improving social inclusion and equity

Indonesia as a nation under the rule of Law, states that no citizens are beyond the reach of law. This means that no groups of people can decide on other faith or enforce their opinions onto others. Tap MPR No. XI/MPR/1998 and The Law No. 28/ 1999 article no. 3 asserts that the state has to be open or transparent in accepting people's aspiration and involve the society in development processes. Society is a force of social dynamics that should be the main players. Openness and society involvement is the core of urban social transformation. Such acts provide the positions that equal treatment to society in development processes. The government delivers full information on policies and public services that they convey to the society.

Implementation of National Program on Self-Reliant Community Empowerment (PNPM Mandiri), for example, has increased substantially to extend one-fourth of Indonesians or about 60 million people. Those who live either in urban or rural areas are enjoying the program that allows them to be self-reliant economically. In many locations of PNPM Mandiri, the community does a self-assessment the economic activities that they would like to participate, develop budgeting plans and determine the amount needed from PNPM funding and take charge of their operation and are responsible for their activities.

Among other programs that increase community empowerment and open community involvement is the Hopeful Family Program (*Program Keluarga Harapan/PKH*). This program is aimed at poverty reduction via improving human resource quality with education, health for low income groups. More than three million poor families in 318 districts and municipalities got helps from this program. This program has become an example for governance that allows for partnership between the government and the community to improve the livelihood of the marginal communities. Many parties including international agencies have expressed a high hope that such programs to be continued and expanded.

Health services currently are not only found in urban areas. Indonesia has become the largest country in the world to exercise national health security system (JKN). Up to august 2014, BPJS has launched JKN to more than 126 million populations. In 2019, it is expected that such JKN will expand to the whole population of Indonesia.



Figure 5-6: Providing health services in the community health centers (source: www.setkab.go.id)

In 2014, not urbanization, but the Law No 6/2014 on Villages or rural areas are ratified. This Law allows for transfer of payment to villages amount to Rp. 1 billion per village annually. This is a new regulation that requires accountability to plan, budget, implement and monitor the activities in order to increase the productivity of 72.944 villages across the nation. Thus, their productivity will be in line with urban productivity and hopefully will ease urbanization level to cities.

Legally, municipalities cannot restraint prospective migrants from entering into their cities. Formally the new migrants have to report their residencies to the former and new governments. Such procedures have long been unobserved. Thus there is no formal policies on urban mobility administration. Some large cities, however, sponsor ‘population policies’ that limit the arrival of new unemployed migrants. The governments require the new migrants to report their new employment several months after arrival, or risk themselves being forced to return to their originated areas. With the implementation of the new Act on Villages, policies on urban development do not need to prioritize urbanization level as a source of discontent in urban development.

To balance the impact of free market oriented development initiated by the private sector and large investors, housing for different income groups have to be built with a ratio of 1:3:6 between high, middle and low income groups. Later on the ratio is changed to 1:2:3 with the goal to social interaction and inclusion will take place between income groups within one area. Governance in urban planning and development needs to continue using principles of mixed used, social inclusion, and community building in more innovative ways to meet the growing demands of livable cities in the future.

VI. Urban Economy

6.1 Improvement of municipal/local finance

Following the execution of decentralization in 2000, transfer of payment from the national to local governments has increased. The local governments have greater responsibilities towards management of public finance. With the proportion of urban population reaching 67.5% in 2025, the local governments have to prepare urban services, such as basic services for housing, education, social security system to ensure welfare of their residents. Such situation requires exceptional capabilities of local managers from planning, budgeting and managing local public finance.

In supporting such requirement, the national government arrives with many policies and strategies to help improve local governments in local finance management, among others:

- Allowing local governments to determine and collect taxes and levies to their residents, based on the Law no 28/2009 on Improvement of local Accountability in Public Management;
- Providing assurance to private sectors on various acceptable types of local levies
- Allowing local governments to issue local bonds to finance infrastructure investment, in order to ensure public services and help increasing local, as enacted in the PP No 30/2011 on Local Lending, as a part of Bappepam Regulation LK);
- Capacity building for local bureaucrats through trainings from the Ministry of Home Affairs, Bappenas and the Ministry of Finance;
- Encouraging local innovation and creativity in managing local finance, through appreciation events, facilitation, and assistance.

Such policies and strategies, claimed local government, help them manage revenues, spending and budgeting. Property tax and BPHTB, which are a part of local tax since 2011, has become the main sources of urban revenues. So is training and other capacity building activities have motivated local bureaucrats to be more creative to manage their cities.

Although there is autonomy on public finance given to the local governments, local capacities to increase revenues remain limited. Low tax base is one to blame. The share of transfer of payment from the national government to the local budget remains high, except in DKI Jakarta. Figure 6.1 shows that in 2011, the average proportion of local revenues to the total revenues is only 7% in Indonesia, or it is the lowest among other developing countries. Meanwhile the proportion of spending to the total local revenues is higher.

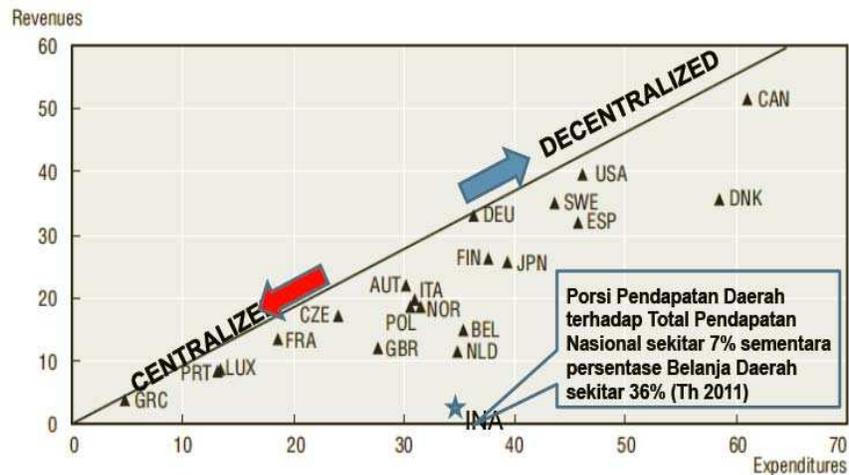


Figure 6-1 Proportion of Local Revenues and Local Spending to the Total National Revenues (Source: Ministry of Finance)

Thus, the sharing of the national government continues to be dominant in the local budgets. The proportion of balancing fund (or *Dana Perimbangan*) to the total local revenues in 2012 reaches to 20%. Within this balanced transfer of payment, general allocation fund (*Dana Alokasi Umum/DAU*) for public servant wages contributes about 70%. Meanwhile in the same year, revenue sharing fund (/DBH) extends to 21.4% and Specific Allocation Fund (DAK) is the lowest. Looking at the trend, the proportion of transfer of payment from the national government is declining slowly. The proportion of local revenues to the total revenues at the district/municipality level goes up to 9-10%.

For municipalities which has a high fiscal capacity, non-government revenues can be initiated such as by issuing municipal bond, private public partnership, or asking for local loans or foreign loans. This requires not only solid fiscal capacity, but also securing reliance on legal aspects. Often the local government lost when their financial dispute with the private sector went to court.

Property tax (*Pajak Bumi dan Bangunan/PBB*) which currently is under the wings of the local governments can be an instrument that can improve local revenues. Property tax, however, cannot be separated from the capacity to provide urban services by the local governments. The so called ‘betterment tax’ is aimed at improving the urban services are allowed especially to increase competitive capacity of a city.

With rather high purchasing power of urban resident, the municipalities can explore charging urban levies more than districts. The capacity of fiscal governance determines the ability to charge the residents viably. In many discussions, parking charges in Surabaya is higher than that in DKI Jakarta, despite the fact the latter has a higher levy base, which is the number of automobiles, than the former.

6.2 Strengthening and Improving Access to Housing Finance

In Indonesia, many households pool their own financial resources or borrow from families/financial lending agencies to gain access to housing. Lending agencies increasingly play a vital role in increasing household capacity to either buy or rent housing. This leads to only households with fixed income and financially viable that can access such housing. Most of the income groups work in modern, formal sector. While only 2.5% of the other income groups, especially with non-fixed income and work in informal sector, can access housing mortgage.

The governments at various levels participate complementarily to increasing supply to public housing. The state ministry of public housing provides subsidy in the form low interest rate for low income groups. The national government also directly engages in constructing simple healthy houses (*Rumah Sehat Sederhana/RSH*), social apartments (*rumah susun*) and its facilities. The local government contributes by providing housing for displaced residents because of public infrastructure construction.

Many housing financial policies have been instigated, of which:

- Strengthening primary market, through refining efficiency (then capacity building) and fiscal incentives (subsidies on down payment, value added tax, soft loan for down payment, credit insurance, credit housing guarantee, etc.);
- Encouraging housing finance schemes, such as housing loans for public servants (*Bapertarum PNS*) and financing secondary housing market. Endeavour toward secondary housing finance institutions have been introduced in 1998, and was completed in 2005 by forming a corporation: *PT Sarana Multigriya Finansial Persero (PT SMF)* via a Presidential Regulation. In 2008, this regulation is amended that allow *PT SMF* to execute liquidity facility up to 2018;
- Security transaction on Housing Finance credit, begins in 1997, and concludes in 2009, based on Regulation of *Bappepam-LK*;
- Housing accessibility through welfare Housing Ownership Credit (*Kredit/Pembiayaan Kepemilikan Rumah/KPR Sejahtera*), where 75% of *KPR Sejahtera* comes from Housing finance liquid Facility (*Dana Fasilitas Likuiditas Pembiayaan Perumahan/FLPP*) and 25% comes from implementing banks. The interest rate is pegged to 7.25% for 20 years, which is low, in comparison with commercial *KRP* interest rate of 11.5%.

The national government has not found effective strategies for sustaining the program on housing provision in the long term. The involvement of local governments to support housing finance has not been significant. Housing financial scheme relies on private banking and financial institutions. Such limitation enforces local governments to play safe and just await grants for housing.

Such situation is made harder by difficulties in land availability. Land price in urban areas gains often unexpectedly, as a result of dysfunctional land market. A lack of legal status of land and complicated system of land acquisition has made housing supply through formal system less than successful.

During the period of 2010 – 2014, the national government planned to build 685.000 Simple Habitable Houses (RSH), 180 owner-occupied apartments (*Rusunami*) and 650 twin-block with its facilities, to support 836.000 low income families in 2012. Funding comes from the National budget (APBN) of about Rp 50 triliun. Aside from that, there is 200.000 simple rental apartment units that cost about Rp. 30 triliun. The total market capitalization for government supported housing construction reaches Rp 80 triliun in 2014.

As a result, non-government stakeholders are involved in land acquisition and housing construction which are:

- Policies from Bank Indonesia, Bank Indonesia employee association cooperates with private sector developers to provide housing and form a Bank Indonesia Outsourcing Forum (FOBI) to guarantee temporary employees in order to gain access to housing credits. FOBI will select, verify and monitor commitment to housing loan payment on a monthly basis;
- The municipality of Palembang via the guarantee institution (PT Sarana Pembangunan Palembang Jaya) cooperating with Bank Sumsel-Babel to help low income, informal sector employees accessing housing loans;
- The municipality of Pekanbaru adopts land re-adjustment from Japan to gain access to land for ring road construction. The local government of Gowa adopts similar measures to construct their ring roads;
- Community based voluntary initiatives to hand over land for public facilities such as in Kampung Improvement Program in many cities of Indonesia.

Despite the fact that many efforts to overcome barriers on housing supply, challenges exist in the forms of:

- More than 80% of houses in Indonesia are self-help and self-constructed. Those involved in self-help housing often work in informal sector. About 70% of Indonesians work in informal sector, with unstable income that leads to limited access to housing loan;
- Uneven population distribution, concentrated population in urban areas and limited government-sponsored funding often causes construction of illegal settlement;
- Non-banking financial institutions such as multi finance institutions or cooperatives to help fund housing loan scheme need to be explored;
- The government has not been firm in implementing control on per capita housing size, which is precedent to housing overcrowding at low income areas in central part of the

cities. Residents in crowded houses are mostly new immigrants, pay monthly or weekly rents, that potentially create slum situations.

- No regulation set for rental agreement between renters and individual landlords to protect their rights and exercise their duties. Both parties are prone to be exploited by the other.

In Indonesia, the establishment of State Savings Bank (*Bank Tabungan Negara*/BTN) in 1897 with the name of *Postpaar Bank*, marked the beginning of formalizing housing finance scheme. In 1963, *Postpaar Bank* changes to BTN. In 1974, the Ministry of Finance gives mandate to BTN to create housing loan scheme (KPR) that was then launched in 10 December 1976. As a result of economic crisis and reform of 1998, BTN credit rating dived and its high loans is at stake, which reduce its roles as a provider of KPR. Since 2003-2004 when macroeconomic stability matures, BTN revives and is able to focus their performance on (i) mortgage loans and consumer banking; (ii) housing and commercial banking, and; (iii) syariah banking. Such focus is supported by: (i) Bank Indonesia which strengthen their monitoring and create Saving Guarantee Institution (*Lembaga Penjamin Simpanan*/LPS) and Financial Service Authority (*Otoritas Jasa Keuangan*/OJK); (ii) many other financial institutions which offer housing loans and allow for 25% of market share by BTN; (iii) improving *legal mortgage* dimensions; (iv) provision of more transparent housing credit schemes to allow viable households to access credits; (v) allowing to form a secondary housing mortgage market.

BTN resumes its roles to extend their services on housing loans to middle and low income groups. Increasing access to housing loan is executed through: (i) opening market opportunities and reducing risks by making prospective borrowers viable to housing loans; (ii) opening opportunities to short term housing loans; (iii) opening access on housing market information to reduce transaction costs; (iv) synchronizing tax policies with secondary housing market; (v) optimizing financial resources for liquidity facilities.

6.3 Supporting local economic development

Laws and policies as the main orientation in housing finance comes from: (1) Law No 32/2004 on local government; (2) Inpres No.3/2006 on Improving Climate for Investment Packages; (3) Government Regulation No.45/2008 on Guidelines for facilitating investment at the local level; (4) Government Regulation No.50/2007 on Separation on function between provincial governments and districts/municipalities; (5) Permendagri No.24/2006 on Guidelines for One Roof Public Service Policies, and; (6) Permendagri No.20/2008 on Guidelines on Organization and Governance of License Issuance Unit at the local level.

Many laws and regulations have been put in place by the national government to encourage economic growth of urban areas, especially to increase their competitive edge. In implementation, barriers are recognized as: (i) limited understanding and awareness on the importance of urban competitive edge as a basis for investment; (ii) weak human resources

capacity in many municipalities; (iii) over enthusiastic efforts to increase local revenues that backfire in the form of high costs; (iv) weak implementation in good governance, and; (v) limited cooperation and synergy between municipalities to increase competitive aspiration from various dimensions (socio economic and environmental).

Megapolitan, metropolitan and large cities, although has a slow population growth, is favored by investors for their updated state of infrastructure and large urban agglomeration. For example, in 2013, Java island absorbs Rp. 66.5 trillion or 52% of total national investment (PMDN), and US\$ 17.3 billion or 60% of total foreign investment (PMA). The province of West Java and DKI Jakarta gets a lion share of investment.

Economic activities concentrated in urban areas attract migrants endlessly especially the youth and highly educated ones. They are the ones contributing to urban growth. A Study by the World Bank (2012) though mentions that urbanization in Indonesia does not significantly contribute to economic growth. Only about 1% of increased urbanization level triggers 2% growth of per capita income. In China and India the growth of per capita income reaches 6%, in Vietnam 8%, and in Thailand 10%. Declining growth of manufacturing sector and high contribution from informal service sector in urban areas underwrites high correlation between urbanization level and growth of per capita income.

A study by McKinsey (2012) shows that during the period of 2002-2010, Jakarta economic growth touched annual 5.8%. Nonetheless, such growth in other cities is higher, for example annual 6.7% in large cities (population between 5-10 millions), annual 6.4% middle cities (population between 2-5 millions), and annual 5.9% for small cities (population between 150 thousands - 2 millions). This indicates that small and medium cities are attractive to investors and in the future their growth may be hampered by “congestion cost” if their connectivity is not supported and anticipated. Such connectivity should be in line with improved logistical systems that allow middle cities to be the hubs. Small cities on the other hand, have annual economic growth of 5.3%, below national average of annual 5.9%.

To improve urban productivity, Presidential Decision No.10/2011 is implemented to reduce the number of low income groups living in urban areas via urban PNPM managed by the Ministry of Public Works. Their programs include: (i) areal infrastructure construction; (ii) improved quality of settlement environment; (iii) development of new settlement; (iv) revitalization of functional areas. There is also inter-ministerial programs such as: (i) low cost housing program; (ii) low cost public transportation program; (iii) public clean water program; (iv) low cost electricity program; (v) improving fishermen livelihood program (in coastal cities); and (vi) peri-urban community livelihood program.

In 2009, BPS notes that 68% of employees in Indonesia work in informal sector. A study by ILO (2009) shows that informal economy in Indonesia is a characteristics belong to urban as well as rural areas. Informal sector increases since economic crisis of 1998 and was a transition forms from agrarian (informal) economy to manufacturing (formal) sectors.

However an entry to formal sector in urban areas is limited that many falls into informal economic activities. In fact, informal sector even in urban areas are a major force in urban economy of Indonesia, either in metropolitan, large, medium or small cities. Cottage industries and self-employment form the largest informal economic units and play parts in urban economy of Jakarta, Surabaya, and Medan. These units often work in food, trade, transportation, and other individual trade professions.

For the last ten years, creative economy emerges and becomes dominant in urban areas of Indonesia. Cities as a center for creative activities supported by rich local culture intertwined with modern sector skills producing goods and services as actualization of creativity. From visual arts to moving arts, from installation to three dimensional arts, musical plays, cultural exhibitions, fashions, films, animation, and traditional food are some of the products /services worth considering. Creative economy in urban areas stretches beyond its physical boundaries and draw people to access or to visit the areas. A model of theme-based *kampung* (*kampung tematik*) in Surabaya is one example of creative city promotion.



Figure 6-2: Jember Fashion Carnival and Solo Batik Carnival are annual events that enhance creativity and attract local and foreign tourists.(Source: www.jemberfashioncarnaval.com)

Urban economic development of these cities have been encouraging, the municipalities also streamline licensing process to be professional, transparent, accountable and certainty for private sector. The Policy on One Door Integrated Services (*Pelayanan Terpadu Satu Pintu/PTSP*) needs to be improved up to the point of using online services. Public participation such as executed by Monitoring Committee on Local Autonomy Implementation (*Komite Pemantauan Pelaksanaan Otonomi Daerah/KPPOD*) is valuable to promote conducive environment for local economic development.

To accelerate economic growth and social welfare in many parts of Indonesia, the national government in 2011, established the Master Plan for Acceleration and Expansion of Economic Development in Indonesia (*Master Plan Percepatan dan Perluasan Pembangunan Ekonomi Indonesia/MP3EI*). Acceleration and expansion of economic development is planned based on natural resources availability and geographical positions in each region of Indonesia.

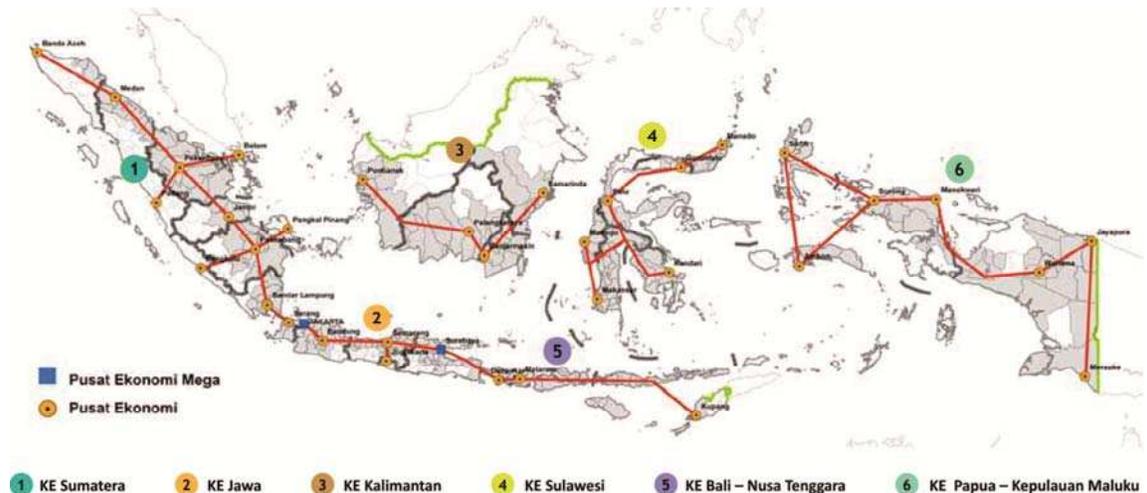


Figure 6-3: Six Corridors for Priority Economic Development in MP3EI.(Source: The Master Plan document of MP3EI).

The main strategy of MP3EI are: (i) to expand regional economy in six corridors which are Sumatera, Jawa, Kalimantan, Sulawesi, Bali-Nusa Tenggara, and Papua-Maluku archipelago; (ii) to strengthen national connectivity that is integrated locally and linked globally, and; (iii) to increase human resource capacity and technology – science connection to support main programs in each economic corridor. With this strategy, cities in Indonesia will be connected and accessible by national logistical system that allow for increased urban productivity and support economic competition.

6.4 Creating decent employment and urban livelihoods

Decent employment and urban livelihood depends upon stability in social, economic and political aspects. Based on this stability, private sector, investors engage in productive capacity that create employment, and reduce poverty level, either in urban or rural areas.

During the period of 1990-1996, Indonesian economic growth was about annual 6.5-8.2%. Per capita national incomes increase significantly and reached US\$ 1.100 in 1996. Economic crisis of 1997, economic growth of Indonesia declined to 4.7% (1997) and even shrank to -13.13% (1998). The resignation of Suharto in 1998 a new era of economic development restructured and in the period of 2000-2013, annual economic growth ranges between 3.6 – 6.5%; is lower than that before the crisis. Sources of economic growth rely on

consumer spending while investment as percentage of GDP only contributes to 4%, below the number before the crisis which is 6-7%.

The dynamics of economic development influences socio economic situation especially poverty level and unemployment level. The percentage of poor people to the total population increased from 11% (1996) to 24.20% (1998) and 23.43% (1999). As a result of implementation of social safety net policies, the number of poor people decreased to 17.75% (2005). Similar patterns found in unemployment level. In 1996 unemployment level was 4.87%, and then increased to 10.45% (2006). Continual policies on economic recovery has contributed to reducing poverty level in 11.57% (2013), and unemployment level 5.92% (Februari 2013) –6.25% (Agustus 2013).

The implication of those two levels on the welfare of society represented by per capita income shows that dynamic situations creating instability. In 1996, per capita income of Indonesians was US\$ 1.154, flunk to US\$ 470 (1998), and slowly ascent to US\$ 3.475 (2013). Human Development Index as a measurement of development success reaches 67.7 (1996),descended to 64.3 (1999), and as economy recovers the index gains 73.29 (2012).

Economic crisis of 1998 was more of urban phenomena, especially in Java island, where urban, formal sector oriented population was hit harder than those living in rural areas, especially outside of Java island and export-oriented sector.



Figure 6-2: Annual Solo Batik Carnival to promote Batik industry and as tourism attraction. (Source: <http://soloraya.files.wordpress.com/2013>)

Urban-rural configuration shows that urban poverty level tends to be lower than that in rural areas. In 1996, urban poverty level was 9.70% and rural poverty level was 12.20%. After the economic crisis of 1998, poverty level in urban areas flunked to 13.47% and in rural

areas to 21.81% (2010). In 2013, these number descents to 8.39% in urban areas and 14.32% in rural areas.

In contrast with poverty level, unemployment level is higher in urban areas than that in rural areas. Between 1994-1997 unemployment level was 12.3% in urban areas and 8.71% in rural areas. In 2004 such level reaches 9.5% in urban areas and 4.4% in rural areas. The main concerns is that urban employment is more formal than that in rural areas, thus the category of unemployment was recorded better. In general, open unemployment in urban areas is two or three times higher than that in rural areas (ILO, 2004). Youth unemployment level in urban areas is also higher than that in rural areas. This indicates that urbanization may be dominant by the youth population.



Figure 6-4: Street vendor shelter in Taman Bungkul Surabaya. (Source: Assets.kompas.com)

Urban areas provide varied and evolving decent occupation. Modern service sector such as financial services, trade, logistics, and other types thrives in urban areas, creative economy is another urban oriented economic sector that expand as well. There is no denying that monthly expenditure of urbanites increased from Rp. 627 thousands (vs. Rp. 371 thousands in rural areas) in 2010 to Rp. 807 thousands (vs Rp 461 thousands in rural areas) in 2012. A disparity, measured by a ratio household expenditure in rural and urban areas, is expanding from 1.69 in 2010 to 1.75 in 2012.

The phenomena of informality paint the landscape of urban development in Indonesia. Urbanization level that cannot be accommodated by the modern, formal sector is absorber by the informal sector. Those works in informal sector are often lowly educated, low productivity that command low wage. However since such sector is not yet replacable by other strategies and policies, high urbanization level will be attracted to this sector which is marked by easy entry level. Thus urban managers need to pay attention to the future of informal sector. Some cities have been able to accommodate informal sector activities in order to increase local revenues. Cities such as Solo and Surabaya, manages and reallocate

their informal sectors to particular spots equipped with basic infrastructure. Surabaya goes further by furnishing their informal sector sites with free wi-fi for their consumers.

Partnership between private sector and local governments in relocating informal sector is executed through Corporate Social Responsibility (CSR). It is mandatory for private sector to engage in CSR, as legalized in PP No 47/2012 on Social and Environmental Responsibility of Corporations. Some private sector uses their CSR funding for informal sector relocation in Jakarta, and some provides loans to the informal traders.

6.5 Integration of the urban economy into national development policies

The Law No. 17/ 2007 on National Long Term Development Plan (Rencana Pembangunan Nasional Jangka Panjang/RPJP) states that the goal of urban development in Indonesia is to: (i) balance development between cities such as megapolitan-metropolitan-large cities – medium cities – small cities; (ii) manage growth of megapolitan, metropolitan, and large cities; (iii) accelerate growth of small and medium cities, especially located outside of Java island, and; (iv) strengthen economic linkage between rural and urban areas in Indonesia.

Another Law, No. 26/2007 on Spatial Management and Government Regulation No. 26 Tahun 2008 on National Spatial Plan, determines that National Urban Development System consists of seven National Strategic Areas (Kawasan Strategis Nasional/KSN); 38 National activity core (Pusat Kegiatan Nasional/PKN); 177 Regional Activity Core (Pusat Kegiatan Wilayah/PKW), and 26 Local Activity Core (Pusat kegiatan Lokal/PKL). With this statement, priority of urban development program can be determined in order to ensure synergy between growth centers optimally manifests.

Continual urbanization level threatens the quality of urban services especially when the municipalities are not equipped with adequate capacity to make the cities livable. Programs such as livable cities are not easy to establish. The Ministry of Home Affairs once surveyed cities on whether or not urban service standards are met, the result shows that many cities are not prepared to develop standardized urban services to serve its residents (Permendagri No. 57 Tahun 2010). Many urban facilities such as basic infrastructure, potable water, sanitation, housing, education and health facilities, market, safety and security, social harmony, natural environmental protection remains sub standards.

Urbanization level has expanded areas to be declared as urban, from municipalities and become the so called autonomous cities. In 1990 there are 73 autonomous cities, in 2012 it becomes 98. Urban areas continue to expand beyond the boundary of autonomous cities. The so called urbanized areas at the sub district level emerge to counter the need for urban agglomeration and economic of scale especially to create trade. Meanwhile, the capacity to provide urban services is far from adequate.

From the economic point of view, urban areas is the strategic core of the national economy, especially with the service sector such as finance and banking, commercial and

trade, non-financial services as well as manufacturing sector. Megapolitan, metropolitan and large cities, in Java and Bali islands, contributes the higher proportion to the GDP. Economic growth of medium and small cities on the contrary remains insignificant, in spite of their high economic growth. Between the periods of 2005 – 2010, economic contribution of 98 autonomous cities to the GDP reaches 40%. Metropolitan of which only 15% of total autonomous cities, contributes 27% to the GDP. Medium cities which consist of 56% of total autonomous cities contribute 7%. While small cities which consist of 11% of total autonomous cities contributes 11% to the total GDP.

Large disparity between metropolitan and large cities located in the west side of Indonesia (Kawasan Barat Indonesia/KBI) with that on the east side of Indonesia (Kawasan Timur Indonesia/KTI) creates negative impacts either to the large cities and metropolitan or to the medium and small cities. For large and metropolitan cities, such negative impacts are: (i) over exploitation of natural resources adjacent to the cities to support growth of metropolitan; (ii) emergence of urban sprawl that encroach agriculturally productive land for built up areas; (iii) environmental degradation in urban areas which influence urban quality of life; (v) emergence of sporadic new housing estates that burden urban centers; vi) mounting pressure to provide urban infrastructure either in quality or quantity. Such trend indicates that *diseconomy of scale* in metropolitan and large cities of Indonesia slowly seep in.

At the same time, decreasing public investment (in infrastructure and urban services) limited human resources capacity, and limited funding capacity in medium and small cities dissociate these cities from providing adequate urban services. Thus, accelerating development in small and medium cities is essential if not necessary to become new centers of urban Indonesia.

The next step is to integrate policies of MP3EI in urban development policies at the local level. MP3EI is a general policy that needs to be synergized at the local level. In response to the need to increase local revenues, local governments have prepared themselves with capacity building including on identifying local potentials as well as sources of local revenues. On the other side, the General Directorate of Local Finance Balancing (*perimbangan keuangan daerah*) promotes training modules that improve the capacities to manage local budgets such as Planning and Budgeting, Local Budgeting, Local Expenditure, Local Asset Management, training on governing local accounting. In 2014, training modules emphasize on front line urban services which is needed for municipalities.

VII. Housing and Basic Services

7.1 Slum Upgrading and Prevention

In 2008, WHO records that more than 50% of the world population lives in urban areas and reaching to 2050 seven out of the ten people will live in urban areas. For Indonesia, BPS predicts that 60% of the population in 2025 will live in urban areas. In 15 years there will be an increase of ten percent of urban population. This creates problem of housing them. Cities with high density areas cannot be expected to anticipate new demand of housing. Reliance on slum as housing supplier can emerge.



Figure 7-1: Pictures of Kampung in Surabaya (Photo: Rita Ernawati, 2013)

Anticipating future growth of slum area, several laws and regulation are put into place. The highest level is the Law no 1/2011 on Housing and Settlement, with a focus on improving the quality of slums through human development.

Management of *kampung* in Indonesia has been initiated since the Dutch colonial era, with a main goal to minimize disease epidemics caused by degrading environment. In the post-colonial era, kampong denigration has been tackled under a policy of *Kampung Improvement Program* (KIP) since 1969 and up to 1989. Dutch-invented *Kampung Improvement Program* (KIP) was the first program on infrastructure development in high density kampung in developing countries. KIP MH Thamrin in Jakarta in 1969-1974 had been able to increase improvement of 1.2 million houses. Significant results from KIP MH Thamrin in DKI Jakarta and KIP WR Supratman in Surabaya stimulate the World Bank to provide soft loans for expanding KIP. In 1979, KIP becomes a national program and inspire innovative programs. Between the years of 1989-2000 a group-based housing development program (*Program Pembangunan Perumahan Berbasis pada Kelompok/P2BPK*) was implemented. Such implementation is overlapped with comprehensive KIP which was executed in 1998-2002. Slum upgrading program shifts emphasis from merely on physical aspects to socio economic aspect of its residents. Programs such as urban poverty alleviation program (*Program Pengentasan Kemiskinan Perkotaan/P2KP*) and *Community-Based Initiatives for Housing and Local Development* (CoBUILD) has adopted a new approach to slum upgrading. In line with MDGs commitment, efforts to accelerate slum upgrading require

integrated approaches. The ministry of Public Works combines slum upgrading program with low income apartment construction, urban renewal, site design as Neighborhood Upgrading and Shelter Sector Project (NUSSP) in 2004. The newest activity announced by the president in 2011 was Cluster IV Pro-People Program that focuses on slum upgrading based on Master Plan on Accelerating and Expanding on Poverty Reduction in Indonesia (MP3KI).

Table 1: Evolution of Slum Upgrading Program in Indonesia

Period	Slum Upgrading Program
Pre-Independence Period	<ol style="list-style-type: none"> 1. Public housing (<i>volswoningen</i>) 2. Public servants housing (Burgelijke Woning Regeling) 3. <i>Kampong Verbetering</i> (kampung improvement) program with a focus on infrastructure improvement
Long Term Development, Phase I 1966-1992	<ol style="list-style-type: none"> 4. Many groups implement self help housing development 5. Cooperative housing 6. P2BPK Program 7. MHT (Jakarta) and WRS (Surabaya) programs 8. Kampung Improvement Program (KIP) 9. Enhanced Kampung Improvement Program (KIP Plus) 10. P2LPK (P3KT, P2LDT, KTP2D) Programs
1992-1998	<ol style="list-style-type: none"> 11. Formation of AKPPI & ASPEK to support P2BPK 12. Comprehensive Kampung Improvement Program (KIP Komprehensif)
1998-2005	<ol style="list-style-type: none"> 13. CoBILD program 14. Self help housing Program (Perumahan Swadaya) 15. Environmental Quality improvement (Program Peningkatan Kualitas Lingkungan/PKL)
2005-2010	<ol style="list-style-type: none"> 16. Development of Area-based Settlement and Slum (PLP2K-BK) 17. New Development Program (Kegiatan Pembangunan Baru/PB) 18. Quality Improvement Program (Kegiatan Peningkatan Kualitas/PK)
2010-2014	<ol style="list-style-type: none"> 19. Development of Area-based Settlement and Slum (PLP2K-BK) 20. Self Reliant housing and settlement PNPM program (PNPM Mandiri Perumahan Permukiman /PB and PK) 21. Masterplan of Acceleration and Expansion of Poverty Reduction in Indonesia (MP3KI)

These programs successfully reduce the proportion of slums in Indonesia. Participation of many stakeholders as well as various government agencies to reduce slum has contributed to such success. Based on BPS data, between the years of 1993 and 2009, the proportion of households living in slums has declined about 8.18%. In 2013, BPS data shows that the proportion of households living in slums is 10.46%, of which 13.94% are in rural areas and 6.96% in urban areas. In the period of 2000 to 2013, the composition of slums significantly declines from 18.70% to 10.46%.



Figure 7-2: Environmentally friendly *kampung* in Surabaya (Photo: Rita Ernawati, 2011)

Based on UN Habitat, decreasing proportion of slum areas in Indonesia shows a new light in the right direction, that it becomes the examples for other countries to follow. The success of programs such as KIP cannot be separated from public participation, which is critical in making the program sustainable. Since KIP was first introduced, public participation has been at the heart of program execution, and continues to be the main drive in comprehensive KIP even with limited resources. The success of comprehensive KIP in DKI Jakarta and Surabaya gain international recognition as successful human-based development model that improve significantly the quality of lives and again, become an example for other countries (see Box 1 : Green *Kampung* Program in Surabaya).

Box 1 Green Kampung Program in Surabaya

Kampung Improvement Program (KIP) is a comprehensive program on quality improvement, not only on the community livelihood but also on the surrounding environment which is executed by public participation and community empowerment.

KIP was initiated in 1968 in DKI Jakarta and Surabaya, then expanded to other cities in Indonesia with the help of World Bank until 1990s. Implementation of KIP in Surabaya is considered to be the most successful. Such success was associated with commitment of the municipality in creating inclusive cities.

In 2003, after being overwhelmed by overcapacity of final waste disposal location, the municipality attempts to change the strategy of waste management. Reduce-reuse-recycle or 3R program was introduced to the communities. Since 2004, the municipality of Surabaya holds *Green and Clean* lomba supported by private sector and mass media. This Lomba ini cukup sukses meningkatkan pera successfully raise public participation in waste management and greening the kampung.

At the municipal level, Surabaya promotes urban greening program by creating parks for youth stakeboarding, greening river banks and main roads. Illegal slums in river banks is relocated to modest apartments (rusun). Economic empowerment program is improved as 'one kampung, one product.' Some kampung develops theme based kampung (kampung tematik) such as needlepoint Kampung, Batik kampung, Tofu kampung, Tempe kampung, etc.. some areas of the cities are reserved for informal sector, equipped with electricity, clean water and *wi-fi*.

Kampung is a dominant form of settlement in Indonesia, and is also the engine of growth to eradicate slums. Kampung development is an integral part to urban development. Through Development Plan Deliberative practice (Musrenbang) as the lowest rank of community aspiration, kampung gains recognition. Awareness of the need to engage in capacity building can be implemented not on heavy physical emphasis, but on non-physical emphasis. Fulfilment of basic needs such as affordable and accessible education and health for low income groups are integrated into slum upgrading program. With unlimited financial resources from national budget, such efforts can be implemented successfully. Funding from Corporate Social Responsibility (CSR) and from the communities (*zakat*, *sedakah*) can also be dedicated to slum upgrading. Strong commitment of all stakeholders will positively reduce the slum as degrading environment.

7.2 Improving access to adequate housing

Housing and settlement are a component of the engine of growth that improve social welfare of the society and form the nation's identity. Article number 28-H of the Amended constitution 1945 mandates that housing and settlement as the basic human rights. It states: "every person has a right to live prosperous mentally and physically, to reside and to live in the healthy and good environment." Such basic rights is the principle expanded in the Law no 1/2011 on Housing and Settlement (PKP), the Law No. 28/2002 on Building Construction, and the Law No. 20/2011 on apartments. In general, policies on housing and settlement is

executed to reduce housing backlog, reduce slums, increase affordability of low income housing, increase local government participation in PKP, increase public private partnership and capacity building for local governments.

In Indonesia, there are two systems of housing provision, which are formal and informal. Formal housing provision is executed by the government and private sector in the form of simple healthy house (*Rumah Sederhana dan Sehat/RSS*), *rusunawa* and *rusunami*. Informal housing provision, on the other hand, is executed by the community in the form of self-help (*swadaya*). The proportion of self-help housing reaches about 80% which shows limited ability of the formal housing system to deliver its services.

At the world scale, UN Habitat records that about 70% of global housing provision is executed by the communities as an incremental /progressive approach. Self-help housing in Indonesia, including those in kampong and traditional houses, is a resource that fortifies the success of housing delivery. Such recognition leads Agenda 21 and Habitat II declaration emphasizing enabling approach especially to strengthen the roles of formal housing delivery system. In Indonesia, such approach is applied in National Policies and Strategies on Housing and Settlement (*Kebijakan dan Strategi Nasional Perumahan Permukiman/KSNPP*) for self-help housing via: (1) self-help oriented housing development; (2) economic empowerment for low income groups and; (3) quality improvement for housing settlement.

In formal housing delivery system, the government confers development of simple houses, medium level houses and luxurious houses to Perumnas and private developers. Development of apartments (rental and owned) also contributes to formal housing delivery, although there is a need to evaluation of its occupancy level.

From the perspective of housing finance, the government provides subsidy for low income groups to access housing. In 2010, the government proposes Housing and Settlement liquidity Program (*Fasilitas Likuiditas Perumahan Permukiman/FLPP*) as an innovative housing finance for low income group. Housing ownership Credit program (*Kredit Pemilikan Rumah/KPR*) supported by FLPP delivers fixed and low interest rate for the duration of 20 years. This is a new program that is competitive in comparison with private banking interest rate of 2-5% for five year duration.

Changing government system from centralized to decentralized system open opportunities for local governments to focus on housing delivery for low income groups. Such opportunities are not balanced with adequate capacity for such delivery. Land availability and land price have been punitive for housing delivery especially in large cities, even for simple rental or owner occupied apartment units (*rusunawa* and *rusunami*).



Figure 7-3: Formal housing initiated by private developers in Surabaya. (Photo: Rita Ernawati, 2011)



Figure 7-4: Self Help Housing by the Community in Surabaya (Photo: Rita Ernawati, 2011)

For low income group living in urban areas, the availability of *rusunawa* provides habitable living that can compete with housing delivery in the slums. In some cities, simple rental apartments (*rusunawa*) is favored by this group as the facilities adjacent to *rusunawa* help ameliorate associated pay for service cost that often come with low income housing. Aside from *rusunawa*, *kampung* is another choice for low cost housing delivery either as rental or as rent to own units. *Kampung* has slowly transformed into livable settlement. Other challenge is to preserve traditional housing often located in *kampung* with formal housing system in Indonesia.

Wide ranging housing delivery in Indonesia is a part of local wisdom, where the the community has freedom to decide where to live, based on their capacity and ability to live. Innovation in housing delivery either for rental or ownership, has been highly appreciated for their eased mechanism and licensing issuance. Synergy and collaboration between the national government and local governments, between communities and private sector, need to

abide as expected by the national constitution of 1945, in order to achieve social welfare for all Indonesians.

7.3 Ensuring sustainable access to safe drinking water

Geographical and topographic condition of Indonesia warrants water abundance. Through local wisdom, the communities have developed traditional water supply system that initially protects water sources such as water wells, boreholes and rivers. Such model has proven beneficial for services in remote areas, as instinctively local wisdom lead to habitat protection to ensure continual supply of clean water. In a qualitative sense, such water sources also fulfill the minimum standard. While for drinking purposes, such water has to be boiled.

Although water consumption from piped water and water bottles increases, in high altitude areas and rural areas consumption of water directly appropriated from water sources is still an acceptable practice. In defining drinking water, Indonesia has a different definition from that of other countries. The latter defines it as ensuring drinking water can be directly consumed by residents. Safe drinking water in Indonesia is defined as access to protected water sources such as piped water, protected rivers, protected wells, and protected boreholes. Such definition is related to the fact Indonesians have a culture of boiling their water before consumption, even when using bottled water. Thus, policies on clean water supply accommodates such intertwine between culture and technology delivery.

Awareness that clean water supply is a part of human rights encourages many parties to collaborate and innovate toward clean water provision especially in water scarce regions. The Ministry of Public Works through community based clean water provision program (Pansimas) initiates collaboration between local governments and the community to deliver clean water to remote regions. Solar water pump, as fruit of collaborative work between UGM and the State Ministry of Research and Innovation, promotes environmentally friendly clean water provision in water scarce regions. The Ministry of ESDM since 2009, constructs up to 200 boreholes in water scarce areas. NGOs and community organizations are also active players in develop self-help clean water provision.

In urban areas, clean water provision is served by PDAM as piped water, which is based on BPS data shows that annual increase in service reaches about 2 percent. The average national clean water provision services reach about 79.34% residents in 2013. About 60% of the provinces can serve its population above the national average. Significant achievement in some urban areas proceeds with services that ensure safe drinking water, either provided for by the governments or by the private sector. The availability of clean water in some real estate is a major attractive factor for prospective buyers.

In rural areas, opposite condition takes place, where the national average of clean water provision is only 57.16%, well below the urban average, and only 33% of the provinces reach above the national average. In cumulative, urban and rural areas, the average national

coverage is about 67.73%, where about 30% of the provinces have the above national average coverage.

Coverage of clean water provision in Indonesia cannot be said as successful for serving all of Indonesians. Environmental degradation, pollution are denigrating factor in protecting acceptable water supply. High precipitation level in Indonesia is another potential source of clean water that has not been well explored. Water wells as the water source for bottled water have been privatized expansively. Such privatization needs to be considered especially if the excess on environmental degradation and decline of groundwater debit are ignored. Nature as environmental service for water provision slowly fades as local wisdom cannot overcome such external forces. Clean water provision program needs to continue, at the same time, environmental protection is firmly defended in order to ensure sustainability of clean water to our advantages and to fulfill the human rights based on water provision.



Figure 7-5: Communal Water Supply of Pansiman (Source: Directorate General of Human Settlements)

Pansimas as one of the leading program for delivering clean water to the low income groups in rural and peri-urban areas, is expected to champion not only facility provisions but also community's behavior of healthy and hygienic oriented living habits. This World Bank sponsored program is designed to support MDGs targets in the sector of clean water and sanitation and support community based development.

Pansimas I Program is implemented in 2008 to 2010 in 110 districts/municipalities in 15 provinces. The first Pansimas was able to reach 6.845 villages consisting of 6.262 regular villages and 593 replicated programs in 593 villages. Pansimas II program in the period of 2013 – 2016 is targeted at 5000 villages in 220 districts/municipalities and 32 provinces.

7.4 Ensuring sustainable access to basic sanitation and drainage

Sanitation, unhygienic habits as well as unprotected clean water contributes to 88% death as a result of diarrhea around the world (UNICEF, 2012). Such condition implies a declining quality of life and productivity of society in the future. Sanitation as one of basic human needs, has become the responsibility of stakeholders, either the government, private sector, NGOs or the communities.

In spite of limited time, Indonesia attempts to reach the target in the sanitation sector set at MDGs at 62,41% (2015). In 2013, Indonesia triumphs with 60.91% of sanitation coverage that many are optimistic that the target can be achieved. A Report of MDGs achievement published by the government of Indonesia in 2010, outline strategies to accelerate sanitation development, through Acceleration Program on Sanitation Development in the Settlement areas (*Program Percepatan Pembangunan Sanitasi Permukiman/PPSP*) for the period of 2010-2015. The program focuses on sanitation improvement in urban high density areas using an approach of community based sanitation (*Sanitasi Berbasis Masyarakat* or *Sanimas*). National Policy on community based Clean Water Supply and Environmental Sanitation provides a framework that allows for demand responsive principles applied in *Sanimas*, and emphasizes the role of women in the operation, maintenance and financing of sanitation.

Since 1993, about the percentage of households accessing hygiene sanitation reaches twice as much in Indonesia. Housing Statistics from BPS shows that in 2010, national coverage of sanitation is only about 32.72% and in 2013 it increased to 60.19%. Such significant increase took place in rural areas where in 2010 the coverage is only 17.39% and by 2013 the coverage expands to 44.74%. in order to reach the MDGs target of sanitation of 62.41%, the government funds about Rp 279.77 billion for off-site system of infrastructure development in six districts/municipalities and Rp. 428,91 billion for on-site infrastructure development system in 651 areas.

For urban areas, innovative technology for clean water and sanitation provision needs a further research. The current state of sanitation and black water discharge system do not apply to overly dense areas, limited space, and adjacent to clean water sources. Strong communal culture, however, deliver a solution toward limited access to land, by developing communal sanitation facilities. In some large cities, they initiate communal septic tanks that are used as energy source to manage further waste.

As a maritime country, Indonesia's coastal line is one of the longest in the world, and inhabited by fishermen. Providing sanitation to fishery settlement either at the coastal areas or in high seas is another challenge. The Ministry of Public Work responds by innovation in vertical septic tanks that potentially applied to coastal areas. As for drainage system in urban areas, maintenance aspect is still the main problem that floods are often the result of ill-

maintained drainage system. Drainage system is an interactive system that also requires cooperation between local governments in order to function as expected.

Aside from infrastructure law, community culture of hygienic living needs to be improved. The Ministry of Health highlights the implementation of Community Based Total Sanitation Strategy (*Strategi Sanitasi Total Berbasis Masyarakat/STBM*) in the period of 2010-2014, which aimed at elimination of open defecation by the end of 2014. The government also takes action in preventative measures by promoting clean and hygienic Daily Habits (*Perilaku Hidup Bersih dan Sehat/PHBS*), with heavy emphasis on communication, information dissemination and public education and school based clean water and sanitation infrastructure development. Presidential Instruction (Inpres) No. 3/2010 on equitable development program is specified on drinking water and sanitation. This is in line with national strategy set RPJMN 2010-2014 which are executed by the Ministry of Public Work, the ministry of Health, the ministry of Home Affairs, the provincial governments, districts/municipalities and community participation. National Program on Community Based Total Sanitation (*Program Nasional Sanitasi Total Berbasis Masyarakat /STBM*) is elaborated into five pillars which are: no more open defecation, hand washing with soaps, household water treatment, solid waste and waste water treatment as integrated system that allow for improved quality of sanitation and drainage system.



Figure 7-6: Shared neighborhood toilets by Sanimas. (Source: Directorate General of Human Settlements)

Similar to STBM, the success of Sanimas program cannot rely only on sanitation facilities and its education, but also on waste water treatment. In 2003-2004, the success installation of community based waste water treatment in six cities, leads to replication and scaling up as decentralized community-based sanitation at the national level via Sanimas Program. In total, between 2003-2008 *Sanimas* has successfully provided access to hygienic

sanitation to 30.251 low income households living in high density slum areas for about 136.602 population.

Since 2010, construction of sanitation facilities is fully supported by DAK on sanitation, separated from DAK on drinking water. General Directorate of Cipta Karya – The Ministry of Public Work supplements funding from APBN with foreign sources and funding from APBD. Currently Asian Development Bank (ADB) supports funding for construction of sanimas facilities in 1350 kelurahan, in 30 districts/municipalities in 5 provinces. Islamic Development Bank commits to construct 200 sanimas facilities in 48 districts/municipalities in 14 provinces. Until 2011, about 551 sanimas facilities in 131 districts/municipalities in 30 provinces have been built. Development of sanimas facilities is one of the main components in order to reach the target set in RPJMN 2010-2014 in sanitation sector. The target is coverage of centralized waste water treatment at the communal scale is for 5% of total Indonesian population in 2014.

The success of sanitation and drinking water in Indonesia cannot be separated from the contribution by Drinking water and Sanitary Forum or *WatSan Networking* formed in 1997.⁵

Box 2 Drinking Water and Environmental Sanitary Forum (AMPL Forum)

Drinking water and Environmental Sanitary (AMPL) Forum is an adhoc forum created in 1997 as media for communication and coordination in the areas of drinking water and environmental sanitation development, encompassing planning, implementation, monitoring and evaluation stages. This forum has working groups that encourage cooperation between governmental institutions responsible for drinking water and sanitation development.

AMPL working group at the National level consists of eight ministries which are: Bappenas, the ministry of Public Works, the ministry of Home Affairs, the ministry of Health, the ministry of environment, the ministry of finance, the ministry of education and culture, and central Bureau of Statistics. This is based on the decision of Bappenas Deputy on Infrastructure as the head of directives on drinking water and sanitation development. no. 38/D.VI/07/2013 on the formation of working group on drinking water and environmental sanitation development.

The goal of AMPL working group is to: 1) prepare policy framework, 2) compose strategies and programs on drinking water and sanitation development, 3) coordinate and monitor implementation of drinking water development, and; 4) disseminate information on AMPL.

Working group of AMPL also has a role as a motivator for advocating and synergizing AMPL development in Indonesia. The work performed by the working group has strengthened coordination and synergy among actors in the sector of AMPL in Indonesia and positively support the achievement of MDGs target and RPJMN 2010-2014. Some programs supported by the working group is Acceleration of Sanitation development in settlement areas (Percepatan Pembangunan Sanitasi

⁵AMPL forum, <http://www.ampl.or.id> – (see box)

Permukiman /PPSP), community based total Sanitation (Sanitasi Total Berbasis Masyarakat /STBM), community based drinking water and sanitation (Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat /PAMSIMAS), community based sanitation (Sanitasi Berbasis Masyarakat /SANIMAS), Drinking water Safety Plan (Rencana Pengamanan Air Minum /RPAM), Sanitation Information System (NAWASIS) and sanitation at school (Sanitasi Sekolah).

AMPL forum is championed by friends of AMPL who involve in AMPL networking – www.jejaring-ampl.org – which has a role to synergize and coordinate potential stakeholders. Currently AMPL network which was formed in 2007, has 66 individual and group members.

Optimizing development of drainage system is executed by integrating with other programs within a city. Requirement of a city to have 30% of green open space is a form of integrative program that allow such space to become recharged areas for rainfalls. Tree planting effort is another program popular not only within the government institutions but also among private sectors and communities. Creation of ponds to optimize drainage system and for flood prevention expand in some, mostly rural areas. Integration of programs and institutional cooperation and with community are continually needed to reach the target of Healthy Indonesia in 2020 and to protect national interests from vulnerabilities.

Green cities development Program (*Program Pengembangan Kota Hijau/P2KH*) initiated by the government in 2012, is intended to accelerate the availability of 30% urban land for green open space. Currently it has been executed in ...cities. P2KH is a collaborative program between districts/municipalities, private sector, and communities facilitated by the government. Each district/municipality signs a commitment to implement P2KH by creating synergic, participatory-based action plan for green cities.

7.5 Improving access to clean domestic energy

Energy is major capital for development in transportation, manufacturing, and commercial, construction and infrastructure, water distribution, and food production. A non-fluctuating, steady stream of energy availability is required for maintaining the momentum of development. In 2012, global energy supply is dominated by fossil fuel (petrol, coal and gas) of about 81.3%, by nuclear sources of 9.7%, and by renewable resources (wind, water, biomass, and solar) of 9%. Dependency on fossil fuel influence economic growth especially of supply instability and price hike. High utilization of fossil fuel also influences climate change by increasing CO₂ emission.

Based on data of energy balance data in 2011, Indonesian oil reserve will exhaust in 2035 and gas will deplete in 2067, coal is expected to wipe out in 2095 (see Box 3). Such condition indicates that a thoughtful strategy on renewed and renewable energy should begin.

Among other developing countries, electrification ratio in Indonesia is considered low (0.85 TOE), in which only 72.95% of households gain access to electricity in 2011. Per capita energy consumption is also considered low particularly since energy infrastructure

development remains minimal especially in remote areas and outer islands. Not only influenced by national interests, Indonesian energy policies are affected by global environmental issues and Indonesia's target on emission reduction by 26% in self-help, and 41% with external supports in 2020.

Table 3: Sources of Energy for Household consumption in Indonesia 2010-2012

indicator	Unit	Early Status (2009)	Target (2014)				Estimated achievement
				2010	2011	2012	
Oil production	Thousand barrel daily	949	1010*	945	902	877	Hard to achieve
Capacity of generator	Added (MW)	31.959	3000 MW annually	2024	5916	2940	On track
	installed (Cumulative MW)			33983	39899	42839	
Electrification ratio	%	65.79	80	67.15	72.96	75.90	On track
Powerplant capacity	Installed (cumulative MW)	1179	5000	1189	1226	1231	hard to achieve
Construction of gas pipes in urban areas	City per household connection (cumulative)	2/6120	19/80000	6/19376	9/45576	14/6576	On track
Construction of Gas pumping station (SPBG)	Unit (cumulative)	n.a.**	21	FEED***	4	8	Require massive efforts

*1,01 million barrel per year is a target based on Strategic Plan of the Ministry of ESDM which is considered realistic, while target for Presidential performance is 1,2 million barrel.

** no government funded development

***Front End Engineering Desig

(Source: The Ministry of Energy and Mineral Resources, 2012)

Awareness on the need to ensure energy supply for development was a major consideration when Policy framework on energy was created in 1976. The goal was to maximize utilization of energy resources via General Policy on Energy (*Kebijakan Umum Bidang Energi/KUBE*) in 1981. The issue on limitation of energy sources was accommodated in the revised KUBE in 1991 with major policies emphasizing diversified energy, intensification, conservation, price fixing, and environmental awareness. National energy

policy installed by the end of 2003, invites participation of stakeholders in energy sector. The result was used to draft the law no 30/2007 on Energy. The law focuses not only on ensuring energy intake but also reorientation on energy utilization.

National energy policy was implemented that produce significant achievement, in which average increased capacity of powerplant went up to 3000 MW annually. This makes it feasible to reach electricity ratio of 80% in 2014. A strategy to convert utilization of gasoline to natural gas is executed as extending natural gas distribution to households. About 76.280 households in 21 cities are expected to benefit direct gas delivery in 2014. In support of transportation sector construction of natural gas pumping stations (SPBG) is expected to progressively materialize, pushed by Presidential regulation (Perpres) No. 64/2012 on supply, distribution, and price control of natural gas. Utilization of geothermal energy was still beginning by producing only 1231 MW, below RPJMN target of 5.000 MW in 2014. All these efforts are executed to counter declining fossil fuel production. In 2014, only 86.83% of the target was achieved.

In general, the aim of energy policy which is to reduce dependency on fossil fuel, by diversifying and intensifying towards coals and natural gas is considered a success. However, implementation of the national energy policy is not enough to counter policy contradiction between fossil fuel conservation and fossil fuel subsidy, and between facilitating automotive industries and supporting mass transportation system of which, continue to create fossil fuel dependent.

Urban areas are famous as a source of pollution. Urban settlement produces 20% of total carbon emission of a city. Activities in urban settlement can be energy intensive such as electricity usage for cooling or heating the houses, automobile idling, open landfill for solid waste collection, and limited urban biomass as a result of tree cutting. With little control of energy usage in urban settlement, such record of emission may be increasing. Energy audit in urban settlement will help check the realities of energy usage. At the same time, remote areas continue to deprive of fair energy usage.

Energy efficiency has been initiated in various economic sectors. Promotion of green design is one of the easiest transformation efforts to reduce emission and has been popular among government agencies and within the society. At the household scale, energy conversion from fossil fuel to natural gas is implemented as a part of energy conservation and intensification policies. Households are encouraged to use energy saving household appliances including LED lights. In solid waste management sector, converting solid waste into energy or known as waste to energy in urban areas, is introduced by the law no 8/2009 on waste management. Waste to energy activities can create environmentally friendly renewable energy. Innovation in solar panel and wind energy are needed considering Indonesia as a tropical country has abundant resources on solar and wind. Innovation at the household level to convert waste to energy especially biogas continue to be refined. In conclusion, energy efficiency effort has to be integrated between sectors especially in

transportation sector, where contribution from other sectors influences performance of transportation.

7.6 Improving Access to Sustainable Means of Transportation

Transportation problems have been sought after features in discussions about urban public affairs. Environmentally non friendly and inequitable services of transportation trigger more problems in the form of air pollution, traffic jam, and high consumption of fossil fuel. Fossil fuel consumption for land transportation absorbs 48% of the total national consumption in 2005. Land transportation is the biggest consumers of fossil fuel.

As an archipelagic country, Indonesia has a major challenge to connect between islands. Patterns of development that is land oriented, result in emphasis on land transportation. There is not yet a viable mass land transportation existed leads to a dependence on private automobile. High urban mobility and inconsistencies of policies on transportation creates intertwined network that is hard to come by.

An Initiative for Sustainable Transportation in Surabaya

Transportation is the third largest CO₂ emission producing sector, of which almost half of it generated by private automobile (45%). It is very high in comparison to emission produced by rail transportation (2%). Construction of new roads cannot keep up with automobile growth. In Surabaya, there are 100.000 new motorbikes and 10.000 new automobiles annually. The result is prolonged traffic jam.

Such jam does not dishearten the municipality. Surabaya city is committed to develop sustainable transportation by opting for environmentally friendly mass transportation integrated with other transportation modes. Construction of urban space dedicated to accommodate non-motorized vehicle such as pedestrian ways or bicycle paths is a form of commitment toward equitable development as well as to reduce fossil fuel consumption.

Initiation of high speed mass transportation system in Surabaya will begin with construction in the North and South corridor of ±17.14 km for trem and East – West corridor for monorail with a length of ±25 km. Monorail and trem stations will be integrated with supportive facilities such as park and ride, trade and service centers and feeder transportation. These modes will be prioritized to use strategic transportation lanes so that effective and efficient mobility can be attainable.

The Ministry of Transportation develops a national transportation strategy which consists of four main policies which are to: (1) develop national connectivity; (2) develop efficient and competitive transportation industry; (3) internalize and integrate strategic inter sectoral issues; (4) execute modern, efficient and equitable urban transportation. The strategy is implemented through: (1) auditing and transportation development especially in Java; (2) redevelopment of modern, progressive public transportation system which oriented itself toward

BRT or MRT; (3) capacity building urban road network; (4) implementation of modern, integrated urban transportation; (5) strengthening the integration of urban transportation institutions.



Figure 7-7: Sidewalk in Surabaya (Photo: Johan Silas, 2013)



Figure 7-8: Bicycle path in Surabaya (Source: Bappeko Kota Surabaya, 2013)

Despite the fact that these policies attempt to accommodate equitable transportation development across the country, concentration of population in Java and Bali islands enforce imbalance in transportation investment. These islands require efficient transportation system

that supports their urban mobility. Aside from road transportation, railway transportation should be revived if efficient and effective transportation is to achieve in Java island. Construction of double track railway and High Speed train are targeted to finish by 2015. Metropolitan cities such as DKI Jakarta and Surabaya initiate mass high speed transportation as monorail or MRT that will be constructed in 2014.



Figure7-9: High-speed Mass Transportation Plans (Monorail and Trem) in Surabaya. (Source: Bappeko, 2013)

For the last couple of years, more people opt for utilizing motorbike as alternative mode of transportation. Data from Directorate General of land Transportation shows an increased number of motorbike production in 2012. In comparison to 1997 when the motorbike production reach 118.000 annually, in 2012, about 256.000 units are produced

annually. For low income groups motorbike represents ability for freedom of movement and improved quality of life. Based on motorbike ownership data, in 2011, about 65.7 million motorbikes ride the roads of Indonesia. This is similar to a ratio for every four people there is one motorbike available. Increased incidents of traffic jam ease the path for motorbike riding and ownership. Culture of low discipline by riders on the road provides specific challenges for the government. Traffic collision often involves motorbikes. Such vulnerable situations requires attention from various stakeholders. Mobility based on motorbikes can be solutions for creating safe, convenient and sustainable transportation.

A challenge of transportation development in Indonesia is gaining support from all stakeholders to create integrative and sustainable transportation system. A change from land-to sea-oriented paradigm is only fair for creating equitable transportation system. Sea transportation can be the basis for sea-based regional connectivity, a competitive edge that a few countries have. Governments and communities have to engage in the politics of transportation, based on human mobility, not on automobile mobility. This is the reason why mass transportation is a requirement especially in large cities. Consistencies of government policies in private automobiles and increasing automotive industries have to reanalyze. Another challenge comes from global seaborne trade that requires international scale sea transportation. As a country with unique geospatial condition, with many islands, transportation system needs to accommodate this uniqueness so that equitable, yet sustainable transportation system can materialize.

VIII. Future Challenges of Sustainable Urban Development in Indonesia

8.1 Introduction

Challenges faced by Indonesian cities and urban areas in the past Habitat II decades have been so complex since the country has experienced a dramatic political shift after the 1998 economic and political crisis. What have been summarized in the previous sections of this report are the ongoing transformations that have been achieved and are still progressing. In this section and the next one – on the future urban agenda – this report focuses on lessons learned from the past experiences and what should be improved.

Given the complexity of Indonesia's urban challenges it is understandable if the summary given in this section could only underline the most critical and strategically relevant to the long term goals of Indonesia's future as a nation.

Urban challenges and future agenda are viewed as inter-related topical areas of the previous six categories -- demography, land and planning, environment and urbanization, governance and legislation, urban economy, housing and basic services. However, given the focus of the new "urban" agenda then challenges are framed in two main cross-cutting issues: (i) the indirect, broader national and global development affairs that affect cities and urban areas, or being affected by urbanization and urban growth; (ii) more direct urban directives and policies, i.e., as a response to or a way to influence the ongoing macro trends of Indonesia's development processes.

8.2 The Macro Condition and the Urbanization Challenges

Research conducted by McGee (1991) in Sugiana (2005) about the Jabodetabek metropolitan region and Asia describes mega-urban as an urban area that covers a wide range of city sizes and their surrounding areas to form a socio-economic and spatial unity. Mega urban city can be formed by one main city and small towns around it, but it can also consist of a metropolitan city, a few large cities, medium and small. The cities are connected by transport networks that support the activities in it.

Mega urban in Greater Jakarta follows a socio-economic model of the region's spatiality which has to face and answer its own specific challenges related to urbanization in the future. They are: (1) *peri-urban area*, i.e., the area around the big cities that can be reached by daily commuters to the city core. The challenge is in a decline of economic activities in rural sectors, farming and agricultural transition to urban land use that needs careful and balanced spatial planning; (2) *rural-urban region*, i.e., where agricultural and non-agricultural activities intensively mixed. The region extends along the corridors between major cities, densely populated areas, and require improvement of transport links with major cities and major infrastructure improvements; (3) *rural areas* around the cities of the

secondary and tertiary hierarchy with high density but slow economic growth that requires a stimulus for development; and (4) *frontier regions* with scattered population and low density where various forms of non-urban activities are located for agriculture and conservation of natural resources.

The fundamental challenge for future urban development is how to build relationship, achieve harmony and integration of the development of semi-urban rural villages that increasingly becoming more urbanized, while at the same time major cities are getting more complex with high intensity of urbanization. In the future, being urban means to face a challenge on how to apply the principles of the division of roles in the development of urban areas so that it can effectively bring in a new form of "sustainable urbanization" in Indonesia.

On the one hand, to develop the overall economic activity the rural areas need to get support from the city, i.e., providing services for inputs to the agricultural activities and agro-production processing as well as marketing of agricultural products to a wider market. On the other hand, urban development can only be done not only through the utilization of human and natural resources from rural areas, but also requires a wider scope of development and variety in industry, services and trades. A balanced and integrated development approach is a prerequisite for the continuity and harmony of rural-urban linkages, i.e., by taking into account an inter-regional cooperation that put priorities and strategic objectives to achieve the welfare of the community and protecting the environment.

8.2.1 Challenges on urban demography, urbanization, and urban/regional development

According to Bintarto (1986) urbanization can be viewed as a concentration of population in urban areas, in terms of: (a) increasing the number and density of population of the city, either due to increase in fertility of city dwellers or caused by the additional residents from the village who thrive and live in the city; (b) the physical city becomes denser and more widespread as a result of population growth; (c) the changing pattern of rural life or the village is becoming more like the city life, and (d) the increasing number of cities in a country or region as a result of the growing number of city residents, the development of economy, culture and technology.

The increasing urbanization in the four decades from 14.8 percent in 1971 to 49.79 percent in 2010 should be observed carefully considering the definition of urban areas over time in Indonesia which is not always the same. The growth rate of urban population in Indonesia is much higher than the national population growth rate, where the national population growth rate tends to decline in the four decades since the period 1971-1980 to the period 2000-2010, i.e., from 2.31 percent to 1.49 percent per years, which in the last two decades shows a relatively stable figure of 1.49 percent per year.

It is known that in the last 50 years the population census conducted between 1961 and 2010 population census there have been several changes in the definition of "administrative area of the city" versus "urban areas" which will have implications for the analysis of urbanization and in turn the conclusions and policy. Next, the challenge in the future for urban demographers and the Central Bureau of Statistics is to determine methods of population data collection that can define "urban areas" in a more representative and consistent ways in order to get a more accurate baseline data on urbanization in Indonesia.

In spite of some shortcomings in the national urban census no doubt that the rapid growth of Indonesia's population and is projected to increase to 271.1 million by 2020. Along with that the urban population is also increasing. If at the end of the current period of Habitat II, about 50 percent of the population live in urban areas, ahead later in the period Habitat III Indonesia's urban population is projected to increase to 66.6 percent, so that in 2035 Indonesia entered the ranks as one of the most urbanizing countries in the world.

Indonesia is among the few developing countries with sustained economic growth which has also experienced a demographic transition since two decades ago. The proportion of the working age population is projected to increase and create opportunities "demographic bonus" or more commonly referred to as the demographic dividend. Demographic transition experienced by Indonesia is also accompanied by other population dynamics that brings wide-ranging impact, namely: (1) the increasing number of population; (2) the aging of the population characterized by an increased proportion of the elderly population; (3) growing urbanization characterized by an increased proportion of the urban population; and (4) population migration characterized by increased inter-regional migration from rural or small towns to larger cities.

This demographic transition could become a "bonus" for the country; however, it does not come automatically. It must be achieved through well planned population policy and of the appropriate development scenario. Efforts are needed to prepare the human resources and the kind of knowledge and skills; maintain the fertility decline; prepare the workforce competitive competencies; and economic policies in creating jobs, labor market flexibility, openness of trade, increase public savings, as well as support facilities and proper infrastructure. The challenge for Indonesia, according to the analysis of the BPS and the UN, is that the lag time or window of opportunity to get this demographic bonus will be closed in 2020 when the younger age groups is becoming older and decrease of the birth rate, at the same time the growing of elderly population must be borne by the working age group.

It is a challenge for the government and all other social institutions to find appropriate strategies and policies) to reach this demographic bonus. Good governance and effective legislation are needed to cope with the increasing population pressure on food and energy needs, especially in the urban centers and at the same time maintaining the quality of the environment and the balance of the ecosystem. The growth of the aging population

requires social welfare system, protection of the elderly and aging health treatment for senescent and degenerative diseases.

Along with the urbanization and urban migration cities require the availability of adequate infrastructure, and at the same time the new development also has the potential to bring social conflict, growing unemployment in the formal sector that lead into increased criminality. The high density of population in urban centers also has the potential to increase pollution and the spread of infectious diseases. Therefore, good governance and appropriate policies in human resources, demography, health, education, economics and employment, infrastructure and use natural resources as well as political and security laws should be directed well integrated to be able to reach this demographic bonus. In addition, the growth and changes in the demographic structure in Indonesia is also varied so that the utilization of the demographic bonus must also be adapted to regional circumstances which are not the same among the provinces.

Inequality or development gap between regions in Indonesia is still a challenge that must be solved in future development. For 30 years (1982-2012) GDP contribution of the Western Regions of Indonesia, which covers an area of Sumatra, Java, and Bali is very dominant, which is about 80 percent of GDP, while the role of Eastern Regions of Indonesia is only about 20 percent. The gap is related to the unequal demographic distribution and the availability of adequate infrastructure.

Since the beginning of the last period of Habitat II there has been a strong awareness about the challenges of the country's direction of regional development, urban development and urbanization policy which is expected to be achieve a more effective and stronger: (i) development of strategic and fast-growing region; (ii) development of underdeveloped and disadvantaged areas, border areas, and disaster-prone areas; (iii) integrated urban and rural development, and (iv) the administration and management of land.

The biggest challenge faced in parallel with changes in the demographic structure and growth of urbanization is to balance the development of metropolitan, big, medium cities, and small towns and with reference to the national urban development system. This is related to the governance and rules on land legislation and land-use planning which is urgently needed to prevent urban sprawl and conurbation as what has been occurring in the Northern coastal cities of the island of Java. This is also pertaining to policies and strategies to control of migration from rural areas to big cities and metropolitan by creating employment opportunities, and business opportunities in the medium and small cities. Urban management and governance are facing big a challenge in accelerating the development of medium and small towns outside Java which is expected to perform its role as the driver of development for the surrounding areas as well as in serving the needs of the citizens.

In addition, the challenges that must be answered is in urban social governance that should be able to ensure the socio-cultural plurality and encourage community solidarity by improving the quality of life in neighborhoods through innovative urban community development to anticipate excessive overcrowding, lack of housing, poverty, employment, and to meet a minimum standard of basic infrastructure and public services. Governance challenges of urban life is specifically needed to ensure an inclusive social life, prevent violence, and ensure security, particularly for women and children, difabled people.

On the other hand, the breadth and diversity of the country face the challenge to achieve an equitableregional development through labor-intensive and high value agro-industry development, especially for the region based on agriculture and marine to balance high urbanization and urban growth in the existing urban centers. Urbanization as an adjective and as a progress toward a better standard of living (or being urban) requires an increase in the capacity of human resources in rural areas, particularly the development of social capital and human capital of untapped potential in the management and utilization of natural resources through the mastery of science and technology so that rural areas do not solely rely on natural resource exploitation. Included are the challenges of developing a network infrastructure that supports production activities in rural areas and nearby small towns in an attempt to create physical, social, and economic linkages and access to information and marketing supports, as well as accessible financial institutions and trade policies that promote agricultural products, mainly on prices and wages that provide better opportunities for under-privileged community groups.

Likewise, among the general public there is still a challenge to open up new perception for those who still holds traditional belief regarding the division of roles between men and women, who tend to be biased towards thinking woman's role only for domestic affairs, and puts limitations in property and inheritancerights, lesser education, limited political involvement, and placing a strict supervision towomen activities.

8.2.2 Challenges on economic growth and urbanization

The macro challenges facing Indonesia in the future is the trend of global and regional economic center of the world which is expected to be shifted mainly from Europe-America to the Asia Pacific region. Contribution to Gross Domestic Product (GDP) of developing countries to the World GDP in 2019 is expected to reach 43.8 percent, an increase from the year 2010 that only 34.1 percent. There is a shift toward economic plurilateral cooperation and the mega block from the existing ones. Three mega trading blocs are expected to be a determinant of global trade and investment architecture where Indonesia will be affected and might also give its impact. Namely TPP (Trans Pacific Partnership) which currently consists of 13 countries in Asia and the Pacific, TTIP (Trans Atlantic Trade and Investment Partnership) which consists of the United States and the EU, as well as the RCEP (Regional

Comprehensive Economic Partnership) which consists of the 10 ASEAN countries and 6 states ASEAN partners.

Indonesian big cities and other urban centers will face increasing economic activity as the future trend of global trade are not only influenced by the role of trade only goods, but also trade in services which is expected to continue increasing and become an important part of the global growth engine. The development of regional and global production networks that encourage increased intra-industry trades between supplier countries would be the main reason for the increase exchanges in services between countries. Implementation of the ASEAN Economic Community (AEC) 2015 will begin in December 31, 2015 With AEC 2015, ASEAN would become a single market and a single unit of production basis, so there will be free flow of goods, services, investment, capital and skilled labor among ASEAN countries. This is certainly an opportunity as well as challenges that need to be addressed carefully by the Indonesian policy makers. Readiness of Indonesia's urban centers needs to be prepared in all areas as a whole, both at the central and at the local level. Education to the public about the opportunities AEC 2015, improving the competitiveness of the national and regional economy, and improving the quality and quantity of Indonesian skilled workers will be a challenge for Indonesia to achieve the success of AEC 2015 for the interests of national development goals.

To that end, economic policy needs to be directed to improve the stability and sustained economic growth with an emphasis on sustainable industrial transformation, so that the Indonesian economy will be based on a higher economic value added. The weakening commodity prices in the international market are estimated to become an important challenge for Indonesia to immediately shift the structure of Indonesian exports toward manufactured products. Meanwhile, the increase in the global supply-chain network also needs to be utilized by the regional Indonesia through more conducive policies, which can open up greater opportunities for local entrepreneurs including small and medium enterprises to participate and become part of the international supply chain.

Improving the competitiveness of the Indonesian economy becomes the main thing that needs attention. The emphasis of increasing the competitiveness of the economy should be directed to the improvement of infrastructure and availability of energy supply, improving the investment climate and business practices, as well as a more efficient bureaucracy. Increased economic competitiveness needs to be supported by an enabling government policy to curb high economic cost, rent seeking and corruption. Improved infrastructure will be focused on efforts to improve national connectivity and making integration of domestic economy for smooth flow of goods and services between regions in Indonesia.

Thus, the main challenge of the economic growth experienced by Indonesia in this decade is to ensure equity and fairness, especially to reduce poverty and inequalities, improve regional balance between Java and outside Java, Western and Eastern regions, and between cities and villages. Efforts to achieve inclusive growth can be achieved if there is support for

political stability, law and security. Government in this regard shall ensure stability by strengthening the regulation and governance, implementing bureaucratic reform, enforcing rules of law and fighting corruption, accelerating the consolidation of democracy, as well as increasing the capacity of national defense and security.

With a per capita income reaching \$ 3,500 (in 2013) which puts Indonesia is in the bottom tier middle-income countries, the biggest challenge for Indonesia's future economic development is how to get out of the “Middle Income Trap.” In Indonesia's current position, to achieve high-income countries in 2030, the national economy should grow at an average between 6-8 percent per year. In order for sustainable economic development, high economic growth must be inclusive while maintaining political stability.

Wealth of natural resources is a huge potential in Indonesia's economic development, and the big challenge for Indonesia is to manage natural resources and biological diversity to achieve sustainable development in order to realize the national goals of development, i.e., economically feasible, socially acceptable, and environmentally sustainable. Efforts to achieve these objectives require careful implementation of the right strategy, as well as to optimize the use of all existing economic potential. The challenge of high, sustainable and inclusive economic growth should be achieved through a comprehensive reform to improve efficiency and Total Factor Productivity in the performance of the economy.

Another major challenge is to eliminate the income gap and improve the standards of living for the bottom 40 percent of the poor to ensure social protection and equal economic opportunity, i.e., to lower Gini index of 0.33 in 2002 which has increased to 0.41 in 2012. Economic activities in urban centers are challenged to be able to create inclusive growth, increase labor-intensive investment, paying special attention to small and micro businesses, ensuring social protection for informal workers, expand the rural economy and develop the agricultural sector.

8.3 Challenges of Future Sustainable Urban Development

The challenge of realizing the national goal of sustainable development is a main agenda that must be put forward as a framework for realizing urban development and sustainable urbanization of Indonesia. In this case there are development challenges in the social, economic, environmental, and institutional aspects that which need a particular attention to the principles of social justice and the preservation of the environment as a whole package, which is placed within the scenario of economic growth and institutional reform.

Given the huge potential of natural resources and biological diversity as national assets for development, it is a big challenge for Indonesia's future urban development to strengthen its policies on the utilization of natural resources in a sustainable manner, simultaneously to restore environmental damages that has been made in the past, yet without compromising the needs of economic growth and of social welfare.

Physical aspects of urban development must also address the challenges of the worsening environmental conditions and their vulnerabilities to disasters, whether natural or manmade. Another challenge that needs attention is the negative impact of climate change in large cities, especially those located on coastal areas, from the risk tidal flood, urban heat islands in big cities, and other kinds of risk.

Another major challenge for Indonesia is to meet its commitment to voluntarily achieve greenhouse gas emission reduction target of 26 percent by the year 2019. This commitment has been outlined in the National Action Plan to reduce greenhouse gases (RAN GRK) through Presidential Decree No. 61/2011 and 33 Regional Action Plans (RAD-GRK) as its derivatives. The national emission reduction plan is followed by the national adaptation action plan which has been completed in 2013. Given the completion of those climate change mitigation and adaptation plans, the future cities are required to include a more detailed implementation plan in their local development programs and to execute its implementation in various related fields comprehensively. It will be a challenge for the governance of the bureaucracy in the Ministerial agencies to make GHG emission reduction targets as important performance indicators and to develop institutional capacity for monitoring and evaluation of its implementation.

Significant and fundamental challenges ahead in meeting the objectives of sustainable urbanization and urban development is how to structure and institutionalize reform laws relating to land to be amended to better suit the conditions and demands that has changed dramatically since the Law No. 5/1960 on Agrarian Principles was published. Innovations in urban and residential areas - such as land consolidation, communal housing, and others - should be accommodated in the renewal of the land laws, which are not only limited in land affairs, but also related to the governance and legislation in a structured and coherent manner that can appropriately respond to the urbanization process of migration from rural to urban areas or to the expansion of urban areas so that the movement of people from rural to urban areas, which cannot be avoided, can generate added value for people's well-being, and not just relocate poverty from villages to cities.

Another challenge in the near future is putting the proposed "Urban Act" coherently to achieve integration of urban governance. Urban areas are not always located within the administrative boundary of the city, so it new legislation becomes a necessity, especially for urban area which is located in inter-district, inter-city districts, and across the province, including urban areas that are wider than its parent city in the district territory. New legislation or a reform of laws is a challenge to systematically maintain coherent with the overall legal framework as well as to provide legal certainty to the general public.

The future challenge to continue the Local Agenda 21 which has been running so far is to strengthen and refine the decentralized system so as to provide opportunities for the governance "urban area" as part of the urbanization of rural towns into cities

(reclassification). A challenge for the preparation of urban development policies of the elected officials to synchronize their campaign promises with formal local regulations and local development plans since it will be implemented by using public funds.

The practice of decentralization and democratization of governance also raises its own challenges with the inequality of access between particular social groups in response to the public leadership of their respective local government. The challenge is how to curb the excesses of decentralization given the widespread tendency of certain elite groups, even familial connections, to occupy the leadership position (i.e., the phenomenon of "elite capture") without sufficient professional capability and ultimately, detrimental to the performance of local financial management and local fiscal capacity, especially where local human resources capacity is still low.

Governance of the city still have to answer the main challenges to improve the integrity, accountability; effectiveness, and efficiency of bureaucracy in organizing governance and public service. Combating corruption is still a serious challenge for development in Indonesia. The main challenge to implement the eradication of corruption is how to make effective law enforcement. This requires improvement of the quality and integrity of law enforcement officers, in addition to the improvement of regulation and legislation. Another challenge in fighting corruption is how to optimize the prevention of corruption by increasing the effectiveness of the reform of bureaucracy and further increase awareness and participation of the wider community through anti-corruption education for the general public.

The challenges of decentralization of a significant community participation in urban development programs need to be followed by improvement of the quality of participation, particularly for government and public sector, as well as empowering people to participate in a fair way. It is closely related to the challenge of building a more inclusive social life and inter-group tolerance and respect to basic human rights.

The main challenge in urban planning and urban land management should eventually be able to answer the fundamental Habitat agenda and the goals of the Post-2015, which are: (1) guaranteeing and ensuring that the public can obtain decent and affordable urban basic services including for those who are temporarily living in "illegal settlements;" (2) prevent the social exclusion as a result of market mechanisms which is still so dominant in urban development and in the provision of urban settlements resulted into a very expensive urban space so that poor residents has been displaced to the fringe areas or living in illegally to sub-standard areas prone to natural disasters; (3) manage the social capital of communities, including immigrants who continued to flow from rural to urban areas so that the process of urbanization would result in an increase in the common welfare; (4) prevent social segregation due to the digital divide between those who enjoy a global interaction (economic, social and cultural) and other residents who do not have access to information technology; (5) prepare human resources as major assets for national development to be improved so as to

provide high competitiveness, among others, marked by increasing Human Development Index (HDI) through population control, increasing the level of education, and improving health and community nutrition.

Challenges ahead in the housing and urban basic services that are vital to the improvement of the health of society are: (1) ensure the security food, drinking water, and energy in urban areas to support national security; also maintain the availability of raw water for drinking water, including the use of other sources of raw water such as rainwater and recycled water; (2) ensure the availability of basic infrastructure to meet the minimum service standards in the provision of water and sanitation services through the implementation of proper asset management, especially related to the maintenance and rehabilitation so as to maintain the economics of the aging infrastructure; (3) streamline and synergize the planning and development of the provision drinking water and sanitation to fulfill the standard quantity, quality, continuity and affordability; (4) provide land at strategic locations in urban areas through the active role of the government for the construction of low-income housing with more innovative development schemes, such as rental apartment or self-help housing; (5) conduct public financial management and accounting system allowing more innovative financing schemes for tariff that take into account the need for operation and maintenance of facilities as well as to allow fair pricing for those who are desperately in need.

IX. The New Urban Agenda of Indonesia

9.1 Introduction

Indonesia's proposal for the *New Urban Agenda* of Habitat III (2016-2036) is developed in the framework of the long term national development goals (2005-2025) to achieve the vision of Indonesia as an independent, advance, prosperous and equitable country.

The achievements Indonesia during the Habitat II era reported in the previous chapters have given valuable experiences and lessons learned, yet they have also provided new challenges as a homework for all urban stakeholders and Habitat partners, i.e., government agencies, businesses, civil society organizations, and local urban communities. The complex challenges of interdependent urban elements should be answers in the country's New Urban Agenda outlined here in the subsequent sections of this chapter.

More specific itemized agenda are listed following the previous six thematic areas. However, cross-thematic issues might be described as overlapping issues in different sections which show the importance of the challenges to be addressed in the future agenda.

9.2 Urban Agenda as an Integrated Part of the National Sustainable Development Goals⁶

National development goals of the Republic of Indonesia have been clearly stated in the Preamble of the 1945 Constitution, which are to protect the nation and the entire homeland of Indonesia, to promote the general welfare of the people and the nation's intelligence, and to participate in the establishment of a world order based on freedom, lasting peace and social justice. The national development is planned and carried out in stages: the long-term, medium-term, and annually.

Efforts to achieve the national goals are implemented through systematic stages and planned processes, integrated and sustainable. Accordingly, the Law No. 25/2004 on National Development Planning System (SPPN) gives the directive of the phases of the National Long-Term Development Plan (RPJPN) over a period of 20 years, also a five-year medium-term (RPJMN), and a yearly planning in the form of annual Government Work Plan (RKP) as the basis for the preparation of the State Budget. The directives given in RPJPN are very important to maintain the continuity of the 5-year term of the government to the next 5-year period.

The national long-term development visions of the above are stated as follows⁷:

⁶RPJMN 2015-2019 document, BAPPENAS.

⁷*Ibid.*

- Independent: being able to realize an equal position with other nations and to rely on own abilities and strengths.
- Advance: achieved prosperous and high quality human resources within a stable political system and well developed institutional and legal framework.
- Equitable: no restriction or discrimination of any kind, either between individuals, gender, or between regions.
- Prosperous: the fulfilment of the needs of Indonesian society so that to enable the country to give a meaningful roles among other nations.

The realization of the vision of the national development is pursued through 8 (eight) national development missions as follows:

1) *Realizing the public morals, forming an ethical, cultured, and civilized society based on Pancasila philosophy*, that is to strengthen the identity and character of the nation. It is carried out through education aimed at having a human being devoted to God Almighty, obeying the rule of law, maintaining the internal and inter-religious harmony, practicing harmonious intercultural interaction, developing the social capital, applying the noble values of the national culture, and having a pride as Indonesian in order to consolidate the spiritual, moral, and ethical development of the nation.

2) *Realizing that the nation's competitiveness*, that is to develop high quality and competitive human resources; improve the acquisition and utilization of science and technology through research, development, and implementation of sustainable innovation; build advanced infrastructures and reform the law and the state apparatus; strengthen the domestic economy based on the advantages of each region by building linkages between systems of production, distribution, and services including the provision of domestic services to achieve a competitive advantage.

3) *Create a democratic society based on the rules of law* by establishing a more solid democratic institutions; strengthening the role of civil society; strengthening the quality of decentralization and regional autonomy; ensuring the development and freedom of the media in communicating the public interests; reforming the legal structure and improving the culture of lawfulness and enforcing the law in a fair, consistent, non-discriminatory, and siding to the common people.

4) *Realizing a safe, peaceful, and united Indonesia*, that is to build military strength beyond the minimum essential force and respected in the region and internationally; improve the capabilities and professionalism of the police to be able to protect the people, prevent criminality and resolve crimes; develop the capability of intelligence and counter-intelligence to create of national security; and improve the readiness of reserve components and supporting components of defense, and develop national defense industry as parts of the overall national defense system.

5) *Creating and equitable distribution of development*, that is to improve of regional development; reduce social inequalities and paying special attention to the

disadvantaged groups and regions; drastically alleviate poverty and unemployment; provide equal access to services for the social and economic infrastructure; and eliminate all kinds of discrimination including gender.

6) *Realizing the beautiful and sustainable Indonesia*, that is to improve the management of the implementation of sustainable development so that it keeps the balance between utilization, sustainability, availability, and the use of natural resources and the environment while maintaining the functions, capacity, and amenities for the present time and the future through the matching of utilization of space for residential, social and economic activities, and conservation efforts; improve the economic utilization of natural resources and environmental sustainability; improve the management of natural resources and environment to support the quality of life; provide beauty and comfort of life; and to better manage the utilization and preservation of biodiversity as a basic natural capital for development.

7) *Realizing Indonesia to become an independent archipelagic nation, advanced, powerful, and based on national interests*, that is to foster a maritime vision to the community and the government toward a marine oriented development of Indonesia; increase the capacity of human resources through the development of sound marine science and marine technology; manage national marine territory to defend the sovereignty and prosperity; and build an integrated maritime economy by optimizing the utilization of marine resources in a sustainable manner.

8) *Realizing the important roles of Indonesia in the international community*, that is to consolidate Indonesia's diplomacy in the context of the national interest; continued commitment of Indonesia toward identity formation and the strengthening of international and regional integration; and encourage international cooperation, inter-regional and bilateral, inter-group, and among institutions in various fields.

Thus the proposed New Urban Agenda in the context of Habitat III has become an integral part of Indonesia's national development and an elaboration of issues related to urbanization reflected on the experience and lessons learned during Habitat II period which has been undertaken by Indonesia.

9.3 Urban Demography New Agenda

- Improved management of urban demographic data is a necessity and a priority to enable getting a more accurate demographic profile in formulating and implementing new urban agenda, especially by providing detailed information about the composition of the city population (the young, the elderly, informal/formal employment or level of unemployment, level of education, etc.) relating to their access to city services and their contribution in socio-economic life of the city.

- Special agenda prepared related to the presence of Urban Youth who needs a particular attention to develop their potential in the demographic transition era until 2025 to be able to enjoy a demographic dividend or a "demographic bonus" where urban youth can play an active part in the building of urban life in Habitat III period of the next twenty years. Some important agenda for Urban Youth includes: special opportunities for young people to become agents of change in their environment and having more active roles in urban activities which in the past they were not considered apriority; improving the quality and capacity of Urban Youth through workforce training and social skill enhancement so that they are positively able to live effectively in complex and challenging urban environment.

- Accommodate the flow of migrants entered the city in the modes of "non-permanent mobility" that is, as social capital developed a more structured and systematic manner by utilizing the potential of the people as subjects and not simply as objects in the urban development process.

- Applying an integrated population policies in the rural-urban relationship with more attention and priority on developing the potential of young people, to be more friendly to children and families, with gender mainstreaming, and a special attention to the elderly and difabled people which are all done through the development of urban social institutions to help the newcomers successfully undergo social transformation in order to become an integral part of the urban communities in which they live.

9.4 Land Management and Urban PlanningNew Agenda

- New urban planning and land management agenda directed to vertical land development, in more intensive and more efficient ways, in terms of both reduced use of fossil energy and more use of renewable energy, as well as to do a better land use planning for green spaces and innovations of new models of urban agriculture. This is to respond to population pressures coupled withlimited urban land particularly in highly urbanized cities and metropolitan region.

- Improvegovernment control to land speculation and large scale landholdings which are detrimentto the public interest that lead to the loss of history, identity, and social functions of the city. This agenda is pertaining to the governance system and new land administration and the harmonization of rules and reforms of related legislation. Land information system and accurate spatial planning are made open with easy access to the public to encouragesustainable investment in urban development, housing and public basic services.

- Implement more inclusive urban planning and environmentally friendly design which is sensitive to the needs of the children, the youth, women, families, the elderly and the difabled (such as "green city" or "city for the elderly").

- Adopt a new paradigm of urban planning in which the improvement of the urban *kampung* is not only intended to improve the physical quality of housing neighborhoods, but more importantly also include the provision of spaces for small and micro-enterprises as an integral part of urban economic activity and urban social life.

- Strengthen the strategic planning to increase the capacity of coastal towns in Indonesia 20-30 years to come which will accommodate 110 million people. One of the important agenda in the coastal urban planning is to make "sea area" as an extension of the hinterland of coastal towns in an integrated way as a unified ecoregion or bioregion in the development of sustainable cities.

- Manage an integrated marine and coastal areas and small islands for the sustainable future of coastal cities of Indonesia, especially for the preservation and cultivation for food and energy sources as well as the opening of new jobs from the development of marine products, the maritime industry, and marine ecotourism.

9.5 Environment and Urbanization New Agenda

- Building a new city models with the concept of "Green City" and climate and disaster resilient cities through program integration by (i) structuring, managing, and controlling the use of urban space that is efficient, equitable and environmentally friendly; (ii) an increase in the quantity and quality of infrastructure that meets the quality of a livable city; (iii) capacity and institutional development in building resilient communities; (iv) the provision of urban green space as well as the adoption of green infrastructure and green building concepts.

- Strengthen the capacity of urban areas to adapt to permanent or long-term climate variations (i.e., climate change) as a necessity in the new agenda, which is concerning with planning, governance and legislations of urban development and of urbanization.

- Adopt a new paradigm of Indonesia as an archipelagic country -- a sea sprinkled with islands -- as new perspective in the new development agenda, namely by developing infrastructure systems combined with and integrated to the use and the function of maritime potential, and not rely on land-based infrastructure only.

- Control and reduce air pollution in urban areas through significant changes to (i) improve access between nodes of activities and urban districts; (ii) reduce the movement of people and vehicles; (iii) prioritize public transport and minimize the reliance on private transportation with fossil fuels. This agenda is closely related to spatial planning, transportation policy and mass transit services, together with a national strategy for the future development of renewable energy for industries and urban infrastructure.

- In the new urban agenda the addition of sufficient green open space is not only aimed at reducing the impact of air pollution but also to cope with future water crisis by providing functions of absorption and water storage and for flood control, and specifically taken into

account to keep the proper water balance and maintain the quality of raw water. The minimum target in the provision of urban water reservoir is capable of storing a minimum of 5% of the maximum demand of urban water.

- Another new environment agenda is quite important even though not directly related to urban agenda is to reduce the impact of air pollution through increased forest areas and maintaining forest peatlands as part of a green open public space in an effort to mitigate greenhouse gas emissions, also dampen the impact of urbanization caused by the movement of people around the forest area to the city due to the loss of economic base of agriculture and forestry in the hinterland.

9.6 Urban Governance and Legislation New Agenda

- A new urban agenda on urban governance and legislation is carried out in line with the overall national legislation and administration reform and land policy aiming to (i) formulate of the new law on land and its implementing regulations; (ii) conduct land mapping validated by involving public participation and indigenous peoples and use of "one map" nationally, and (iii) develop a comprehensive land management to all levels of government, national, provinces, and locals.

- The new agenda is in line with the objectives adopted globally⁸ to produce the overall solution, integrated, cross-institutions and inter-actors at national and local levels to address the complexity of the transaction and the status of the land to allow for slum upgrading, housing construction and other strategic urban development, by providing legal certainty about land rights that are indispensable to ensure effective investment by government, private enterprises, and community initiatives.

- Build management capability and institutional system that provides legal certainty on the status of collective ownership or communal land by empowering community organizations either as formal "mediator" or informally to gain access to sources of financing for the construction of housing and urban basic services.

- To place the new urban agenda in a structured and institutionalized system of good governance and placed within the framework of laws and regulations that have been updated in accordance with changes/development of time and can be used as a legal reference to the governments from the national to the local levels, which are very diverse.

- Governance in the new urban agenda at the local level should be carried out as an attempt to apply laws and regulations which guarantee equal rights and responsibilities of

⁸For example in UN HABITAT publication, Szilard Friczka and Ruth McLeod (2009). *Land and slum upgrading*. Nairobi.

citizens, prevent discrimination and primordial favoritism especially for public services and political positions.

- Provide legal rules and governance policies to prepare communities to deal with the impact of globalization (including the competition to attract investment) in a fair and impartial way to protect local interests and socially and economically disadvantaged groups.

- Setting targets to urban governance to meet Urban Service Performance (SPP) through integrated programs such as: (i) the acceleration of the attainment of urban basic services (housing, clean water, waste management, sewage treatment, drainage, pedestrian, and green open space) which meet the standard of livable city; (ii) improving the quality and quantity of health and education services which are affordable and easily accessible; (iii) the provision of governmental and economic infrastructure, particularly in the trade and services which are safe, convenient and easily accessible for all people, including the elderly, difable people, women, and children.

- Improve the quality of public participation in the real sense and not just a formality of participatory procedures (e.g., in *Musreimbang* community participatory planning) through increased knowledge in strategic public affairs to the wider community.

- Having active involvement of urban practitioners and experts including professional organizations as "Habitat partners" to increase the capacity of local governments in planning, implementation, monitoring and evaluation of urban development and the management of the city.

- Adopt innovative governance model of for the development of competitive "Intelligent Cities" through the integration of programs in (i) education and citizenengagement who are innovative, creative, productive, and able to exploit the potential of the local social-cultural diversity; (ii) the use of ICT in the provision of public services through e-government, e-commerce, and e-infrastructures.

- Increase the capacity of co-operation between cities and between regions within the country and between countries especially in the Asia-Pacific region related to urban management and in local and regional economic development.

- Provide updated data and information of urban areas, especially on socio-cultural aspects, as well as economic, environmental, governance, urban services, within nation wide urban systems that are stored in the geo-spatial information system with a scale of at least 1: 25,000 to provide better accuracy in the process of urban planning and development.

9.7 Urban Economy New Agenda

- The new agenda of urban economic development is carried out through basic programs for the improvement of the quality of human resources and workforce skills, and

encourage certification of competence for workers to be competitive in the ASEAN and international markets.⁹

- New urban economic agenda geared to achieve balanced development between regions, rural and urban, and to achieve synergies of among national economic growth centers through transportation system connectivity and integrated telecommunications. In particular, attention is given to eliminate disparities between regions both between urban and rural areas and among provinces and regions (i.e., between Eastern and Western parts of Indonesia).¹⁰

- Stimulate urban investment and economic activities in sectors that have not been fully developed by increasing the synergy and coordination among the different institutions to maximize quality for business services and state own companies or government investment, as well as private and public partnerships.¹¹

- Improve regional financial governance through capacity building of local financial managers and to develop the performance of government officials' for a more innovative city, which is not limited to boost government revenues, but also to allocate and spend funds on strategic priorities.

- Improvements in the area of fiscal governance with certain tax transfer from the province to the city in line with human resource capacity building in the city and the utilization of private resources and public financing.

- Open cities for the global market, and simultaneously strengthen a balanced relationship between cities and their hinter-region (land and sea), economically and ecologically. Encourage the development of agricultural processing industries in the suburbs and open the market for the local products derived from the hinter-region and for the products of small and micro enterprises of the urban *kampung*.

- Strengthen the role of urban *kampung* as the place for people's informal businesses which are synergized with the formal urban economy through market incentives and more inclusive urban economic policy targeted to marginalized social groups who still have not been getting a chance.

9.8 Housing and Basic Services New Agenda

- Create the alignment of housing development with the urban settlement improvement in inclusive urban setting, through (i) planning and managing the locations of new development or the improvement of the existing ones; (ii) the ease of access to sources

⁹ Quoted from the mid-term national development plan, RPJMN 2015-2019.

¹⁰ *Ibid.*

¹¹ *Ibid.*

of funding and financing systems; (iii) an integrated *kampung*-development as both residential areas and economic activities of the community; (iv) the provision of institutional supports responsible for the implementation.

- Create a national system of effective incentives for decentralization in housing development and provision urban basic services, particularly to eliminate slums, through the application of spatial planning and urban design in favor of the low-income people and by having good understanding of their limited ability and to accommodate their needs.

- The new urban agenda will give a special role to the urban *kampung* as a breaker of “poverty and squalor” associated with the urban economic agenda to improve the ability of the *kampung* community’s self-reliance so that they can play a more active role in improving the quality of housing and basic services through an intervention system of government incentives targeted toward more inclusive, safe, orderly, decent, and sustainable urban neighborhoods.

- Related to the urban housing policy, a new urban agenda is focused on improving inter-agency coordination at both the central and local levels in housing and urban development policies and plans in which slum upgrading programs are integrated as set out in the national target to be eliminated at least in achieving the MDG 2020 target of 6% or of a maximum eradication target to zero.

- Giving high priority to improving the capacity and readiness of local government in the implementation of slum upgrading/eradication programs with other sectors in urban development programs, particularly in the procurement of land for the construction of affordable rental apartments (*rusunawa*) for low-income groups (MBR) and self-help housing construction.

- Give priority to housing financing facility that can be widely accessed by low-income people including 70% of them who work in the informal sector, such as, expanding the service of Housing Finance Liquidity Facility (FLPP) which so far has reached low-income groups working in the formal sector. Improving the effectiveness of affordable rental apartments development program for low-income groups through a more accessible and transparent financial system, rational and fair in applying the subsidy system where necessary.

- Improve the effectiveness and efficiency of infrastructure financing and to develop alternative funding mechanisms or creative financing schemes and Public Private Partnership (PPP), prioritized to assist local governments for water and sanitation programs and projects. This agenda associated with more optimal utilization of alternative funding sources such as CSR funds, microcredit facilities, and to be an integral part of good urban governance.

- In conjunction with the financing system of urban basic services a rational calculation of tariffs is adopted that satisfies the principle of full cost recovery as well as to consider the customer's ability to pay where subsidies can be given fairly to the appropriate urban poor who are desperately in need.

- In relation to urban and regional planning the new agenda gives priority to the provision and preservation of land to ensure the quality of raw water sources, especially in the hinterland, so that good quality of water service can be provided in an affordable way. Also, water supply and sanitation are synergized and coordinated with other programs and activities in ministries/agencies and also with local agencies, such as through the provision of school sanitation, village development fund, and other programs to ensure the preservation of water sources.

- Agenda to ensure the sustainability of water infrastructure and sanitation through the integration and development supports in other sectors, such as the readiness of the local government, licensing, community health promotion and disease prevention, and so forth, including the use of alternative raw water sources such as rainwater and recycled water, as well as appropriate asset management strategy in maintenance and rehabilitation to extend the economic life of urban basic infrastructures and to satisfy the standard parameters of quantity, quality, continuity, and affordability.

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XI. Annex 1 - Indicators

1. Percentage of Households Living in Slums

Year	Percentage
1996	17.02
2006	13.52
2013	11.63

Source: Statistics Indonesia

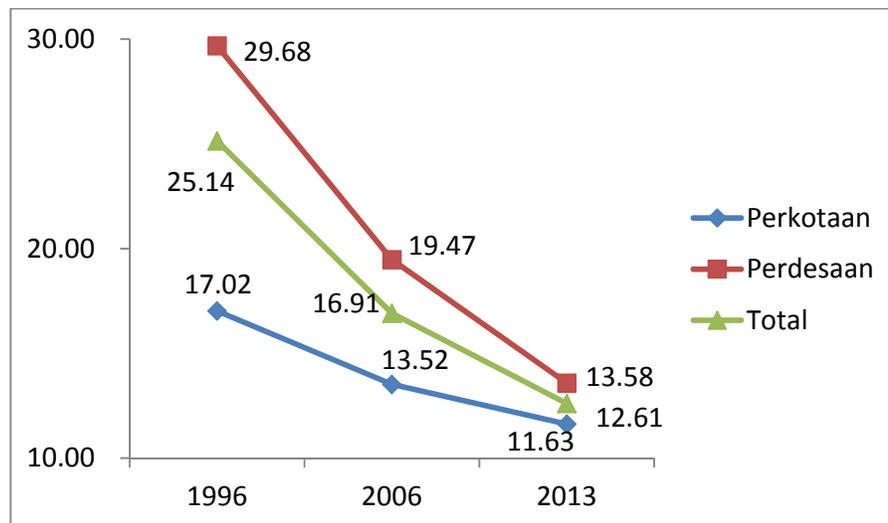
2. Indicators of slums

According to Statistics Indonesia (If the score is less than 35 %, the household is considered living in slum).

- Lack of access to safe drinking water (weighted score 15 %)
- Lack of access to sanitation (weighted score 15 %)
- Low level of durability of housing (weighted score 35 %)
- Inadequate living area (weighted score 35 %)

3 Percentage of people living in slums

(In urban areas or *perkotaan* and rural areas or *perdesaan*)



4. Percentage of Urban Population with Access to Adequate Housing

Indikator	Urban areas	Rural areas	TOTAL
Own house	72.17	88.07	80.18
Rental house	15.28	1.32	8.24
More permanent (non-thatched) roof	99.31	94.71	96.99
More permanent (no-bamboo) walls	94.39	85.72	90.02
More permanent (no soil based) floors	96.60	86.17	91.34
Per person floor area < 7.2 m ²	13.84	11.37	12.60

Source: Statistics Indonesia

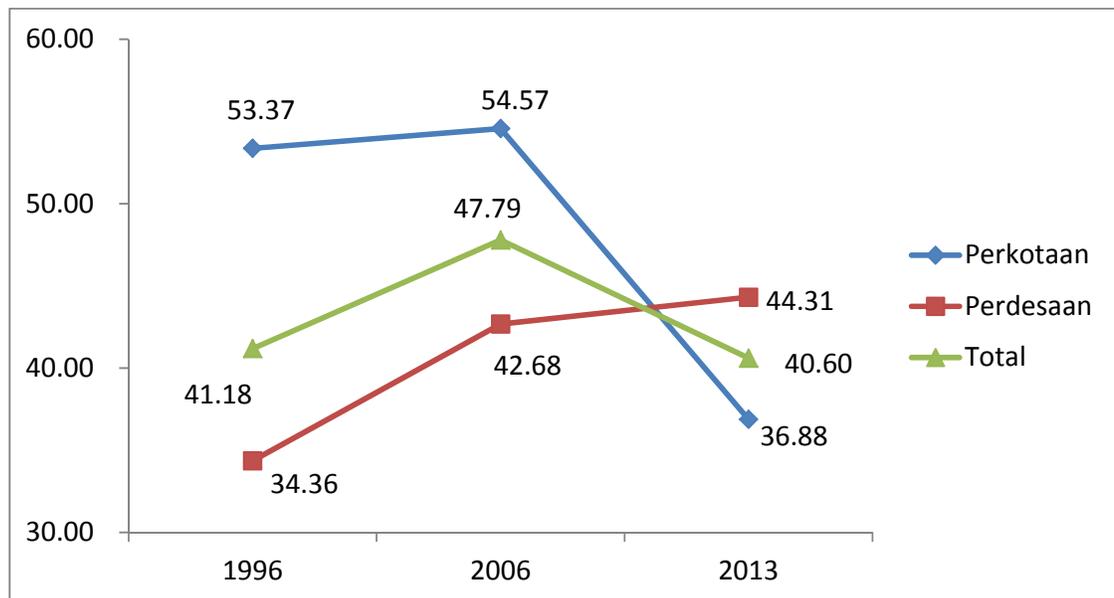
5. Percentage of People Residing in Urban Areas with Access to Safe Drinking Water

Province	1996	2006	2013
Aceh	26,12	31,34	31,86
Sumatera Utara	37,84	50,67	38,43
Sumatera Barat	35,54	46,45	33,54
R i a u	45,96	46,54	35,63
J a m b i	38,27	46,62	39,66
Sumatera Selatan	35,51	45,26	43,43
Bengkulu	21,20	36,73	26,10
Lampung	24,92	42,92	40,37
Bangka Belitung	-	31,39	25,47
Kepulauan Riau	-	57,03	14,10
DKI Jakarta	58,58	56,85	21,91
Jawa Barat	33,70	38,82	30,99
Jawa Tengah	42,17	54,58	54,56
D.I. Yogyakarta	42,54	54,93	60,81
Jawa Timur	50,62	52,87	52,50
Banten	-	34,49	19,94
B a l i	59,73	60,33	50,29
Nusa Tenggara Barat	30,51	39,67	41,64
Nusa Tenggara Timur	40,31	45,00	45,19
Kalimantan Barat	49,01	55,38	50,51
Kalimantan Tengah	31,62	37,37	27,52
Kalimantan Selatan	42,60	54,16	48,95
Kalimantan Timur	59,74	65,61	27,76
Sulawesi Utara	42,13	56,08	32,06

Sulawesi Tengah	34,67	39,45	37,77
Sulawesi Selatan	36,54	50,12	45,14
Sulawesi Tenggara	41,14	53,83	52,32
Gorontalo	-	39,44	35,25
Sulawesi Barat	-	33,19	30,30
Maluku	47,04	56,26	45,78
Maluku Utara	-	45,03	47,08
Papua Barat	-	43,25	43,48
Papua	33,68	36,33	25,22
Indonesia	41,18	47,79	40,60

Source: Statistics Indonesia

Definition: Safe drinking water is a source of household drinking water and / or cooking and / or bathing / washing comes from the tap, rain water, and pumps / boreholes, protected wells, protected springs with a distance ≥ 10 m (only for drinking water) from septic tank.



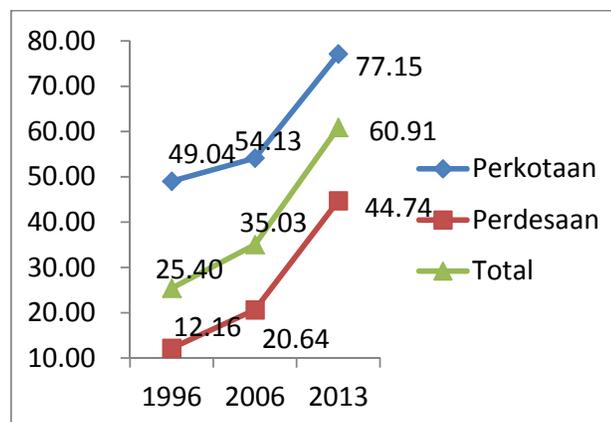
6. Percentage of People Residing in Urban Areas with Access to Adequate Sanitation

Year	Percentage
1993	53,64
1994	57,71
1995	45,02
1996	49,04
1997	50,66
1998	51,19
1999	56,14
2000	53,73
2001	56,56
2002	57,29
2003	56,73
2004	59,20
2005 ⁴⁾	n.a
2006	54,13
2007	64,67
2008	66,70
2009	69,51
2010	72,78

Source: Statistics Indonesia

Adequate sanitation is the use of household waste facility privately and shared, with the swan neck type toilets, and landfills are a cesspool of feces

Formula: $\frac{\text{The numbers of households that use waste facility are on its own and or shared, with the swan neck type of toilet, and fecal landfills is a septic tank}}{\text{Total Number of Households}}$



Year	Urban areas	Rural areas	Total urban + rural
(1)	(2)	(3)	(4)
1993	53,64	11,10	24,81
1994	57,71	12,24	27,52
1995 ^r	45,02	9,63	21,93
1996 ^r	49,04	12,16	25,40
1997 ^r	50,66	14,04	27,65
1998	51,19	15,62	28,90
1999	56,14	17,27	32,56
2000 ¹⁾	53,73	17,39	32,72
2001 ²⁾	56,56	17,26	34,30
2002 ³⁾	57,29	18,03	35,64
2003	56,73	20,66	35,61
2004	59,20	22,52	38,13
2005 ⁴⁾	n.a	n.a	n.a
2006	54,13	20,64	35,03
2007	64,67	28,63	44,20
2008	66,70	31,40	48,56
2009	69,51	33,96	51,19
2010	72,78	38,50	55,54

Notes:

¹⁾ Year 2000, national census was not conducted in Provinces of NAD and Maluku

²⁾ Year 2000, national census was not conducted in the Province of NAD

³⁾ Year 2002, national census was conducted in Provinces NAD, Maluku, North Maluku, and Papua at the provincial cities

⁴⁾ Year 2005, sanitation was not in the national census questions

7. Percentage of People Residing in Urban Areas with Access to Regular Waste Collection

(Data is not available)

It is estimated that just over half (56 percent) of Indonesians have access to waste collection and disposal systems (<http://www.indii.co.id>).

Region	Population (million)	Population being Served (million)
Sumatera	49.3	23.4
Jawa	137.2	80.8
Bali & Nusa Tenggara	12.6	6
Kalimantan	12.9	6
Sulawesi & Papua	20.8	14.2
Total	232.8	130.4

Source: *Statistik Persampahan Indonesia 2008*, Ministry of Environment
(from Indii SWM Scoping Study)

8. Percentage of People Residing in Urban Areas with Access to Clean Domestic Energy

(Not Available)

Electrification ratio is still low (0.85 TOE). In 2011, only as many as 72.95% of total population get access to electricity. At the regional level in Indonesia, there is also unequal access to electricity. For example, in DKI Jakarta province, the electrification ratio reached 100 %, while in Sulawesi Barat, Papua, and Nusa Tenggara Timur (NTT) the ratio was about 30 % in 2011 (www.seadiproject.com).

9. Percentage of People Residing in Urban Areas with Access to Public Transport

(Not Available)

World Bank study shows that despite rapid infrastructure development in large urban areas, traffic congestion continues to hamper large cities like Jakarta, Bandung, Medan, Surabaya, and many satellite towns like Bogor, Bekasi, and Tangerang. Public transport, including buses, minibuses, and taxis, is commonly used despite poor public transport facilities. The city of Jakarta has implemented a Bus Rapid Transit system on several kilometers on key city route to help ease traffic congestion, particularly at peak times.

10. Level of Effective Decentralization for Sustainable Urban Development

a) Percentage of Policies and Legislation on Urban Issues in Whose Formulation Local and Regional Governments Participated from 1996 to the Present.

Type of spatial plan	Total	Percentage
1 RTRW-K (Municipal general spatial plan)	77 (of 93)	82.8%
2 RTRW-Kab (District general spatial plan)	304/398	76.4%
3 RTRW Provinsi (Provincial general spatial plan)	25/33	75.8%
4 RTR Pulau (Main Island Spatial Plan)	7/8	87.5%
5 RTR KSN Kawasan Perkotaan (Metropolitan Spatial Plan)	6/6	100%

b). Percentage Share of Both Income and Expenditure Allocated to Local and Regional Governments from the National Budget.

Region	Percentage
Sumatera	72.38
Jawa-Bali	53.46
Kalimantan	76.20
Sulawesi	77.40
NTT-Maluku-Papua	76.25

Source: Analysis Compilation from Ministry of Finance, 2013. <http://www.djpk.kemenkeu.go.id>

11. Percentage Share of Local Authorities' Expenditure Financed from Local Revenue

Region	Percentage
Sumatera	15.60
Jawa-Bali	33.57
Kalimantan	18.31
Sulawesi	12.62
NTT-Maluku-Papua	5.93

Source: Analysis Compilation from Ministry of Finance, 2013. (www.djpk.kemenkeu.go.id)

12. Percentage of City and Regional Authorities that Have Implemented Urban Policies Supportive of Local Economic Development and Creation of Decent Jobs and Livelihoods

(Not Available)

13. Percentage of City and Regional Authorities that Have Adopted or Implemented Urban Safety and Security Policies or Strategies

(Not Available)

14. Percentage of City and Regional Authorities that Have Implemented Plans and Designs for Sustainable and Resilient Cities that Are Inclusive and Respond to Urban Population Growth Adequately

(Not Available)

15. Share of National Gross Domestic Product (GDP) that is Produced in Urban Areas

According to the study carried out by Mc. Kinsey Global Institute (2012), 53% of the population in cities in Indonesia producing 74% of GDP.

Best Practice Case Study 1: Surabaya

The Green Kampung Sustainable Neighborhood Development and Community Building as Part of a Strategic Spatial Planning Policy.¹²

Context and Rationale

Surabaya is the second largest city in Indonesia with a population of over 3.1 million and a city area of 333km². As the capital of East Java province and as a port city supporting trade and services, Surabaya is now characterized by new medium-rise office blocks, modern markets and hotels along green boulevards co-existing with the early 20th century heritage. In addition, popular low-rise urban neighborhoods are still dominating the cityscape and have helped preserving the humane scale of Surabaya. The low-income, popular neighborhoods – the kampongs – are particularly important to preserve the indigenous socio-cultural values of the 577 year old city.



Figure 1: a Draft Surabaya Spatial Plan 2010-2025

Surabaya is an important economic center for Indonesia. The urban hinterland of Surabaya (7m people) accommodates a large national and homegrown ‘mittelstand’ industrial conurbation, producing for the consumption markets of Java (150m+) and Indonesia

¹²The main story of the case study was quoted from the field notes for the input to UN Habitat Expert Group – International Guidelines for Urban and Territorial Planning proposed by Mr. Imam Ernawi, DGHS Indonesia, with Joris Scheers as the author and supported by Iman Kritian of Surabaya City Planning Office.

(240m+). Java is an island with poor over land transport connections so far and Indonesia is an archipelagic country. Transit and services are essential functions of Surabaya city and have been competing with other needs, including the preservation of open and green space, and the endeavor of the city to maintain the indigenous kampongs.

Statutory land use planning of Surabaya city saw its first challenges in the 1980s, when simple zoning solutions aiming at opening up industrial areas within the city were accompanied with plans for the indiscriminate conversion of semi-rural areas and large mangrove areas into urban residential zones. Successive land use plan revisions oscillated, either trying to hold up a 'modern' city vision or going back to showing Surabaya's de-facto urbanization, which mangroves already disappeared, the city rivers heavily polluted and the indigenous neighborhoods remaining poor and underserved.

Attempts to improve low-income settlements actually took place since the Dutch pre-1942 administration. A Kampong Improvement Program (KIP) was introduced in 1923, to overcome sanitation issues in settlements in close proximity to the European quarters. This incremental upgrading approach continued to be implemented intermittently up to the 1980's. A comprehensive citywide approach was never achieved and was neither credibly captured in conventional city development plans for trunk infrastructure.

Process and Solutions

Surabaya has been able to put a flagship Green Kampong program at the heart of its innovative planning and development program for the city. Moving from ad-hoc experimenting with environmental programs collaborating with kampong communities, the city has put in place into a comprehensive green and clean kampong development program. This program has become a citywide strategy, supporting further planning and development. The strategy combines tools for governance and development planning which became available to Indonesian city administrations in the last 15 years: decentralization, local democracy, citywide planning, participatory planning, participatory budgeting and environmental management with stakeholders, including the private sector.

In 1999, Indonesia moved abruptly but compellingly to local authority empowerment. Elected mayors and councils have now genuine control over local budgets and programs. After tremendous teething problems, a new generation of democratically elected leaders is re-inventing local governance and local planning, showing how to make it work to the benefit of people. Innovatively applying new, aspirational but untested national laws on comprehensive and participatory spatial planning and participatory budgeting, they are re-inventing city management relevant to local communities and the local economy. Community empowerment and citizen collaboration is hereby an essential tool to achieve a livable and prosperous city, capable of increasing its economic potential.



Figure 2: Annual Green and Clean Competition



Figure 3: Green Communities in Surabaya (Source: Rita Ernawati, ITS)

At the neighborhood level, Surabaya encouraged communities to endeavor a zero-subsidy kampong greening approach. Solid waste is sorted, recycled and sold, or re-used. Revenues are used to pay for greening investments. Communities are encouraged to seek out small-scale development initiatives, e.g. to build low-cost gray water recycling infrastructure or small solid waste processing facilities. Tiny revenues are put into the cleaning up of streets and buying seedlings and flower pots. Successful communities also use revenues to pay for night watch capacity to enhance safety or even to pay school fees and other social needs. Organic waste is recycled as compost. The city saves on solid waste collection expenditures and returns funds through the employments of facilitators and occasional awards. Local companies and the media are sought to sponsor specific neighborhoods and promote competitions and awards. National poverty reduction programs are logged in to improve infrastructure and upgrade houses of extremely vulnerable and deprived people within the communities. Community budgeting through a map-based e-governance platform was introduced – a real novelty compared to the conventional approach of government officials collecting community priorities, as applied elsewhere in Indonesia.

At the city level, Surabaya has introduced a citizen park space program. Confronted with degraded river banks and left-over public space occupied by squatters, Surabaya worked with slum communities to re-locate and to turn idle space into prime and popular green community parks, each co-opted by local private companies and thus turning companies into sponsors of Surabaya as a city of livable neighborhoods. The main river is not yet clean, but the ownership of the riverbanks as a urban public space and as the visible promise of a sustainable and smart Surabaya is now shared by ordinary communities and the private sector.

Furthermore, the city has started to move away from hard transportation planning serving mainly the port with elevated toll ways to a comprehensive mobility planning approach, creating a finer grid of roads connecting the city with the periphery and re-starting a tram network within the city. The city has not eliminated transport solutions serving low-income people well (pedicabs, small buses) seen as hindrance in many other cities. On the contrary, it is creating standards for people-friendly public space arrangements near tram stops, more pedestrian space and bicycle lanes. These solutions will feed into the new cycle of land use planning revisions.

Results and Impacts

The Surabaya City Government has set up Green Kampong Program in 2006 and has seen it take hold in 154 neighborhoods. Its strategic planning policy to put liveable, compact and green neighborhoods at the heart of sustainable urban development is on track. Surabaya has achieved already the following assets and capacities:

- Community based solid waste management, leading to revenue generation, employment and a measured decrease of disease

- A community based facilitator network of “environment cadres” (28,500 people at present) and “economic heroes”, supported by training and skills development workshops
- E-governance platform for map-based community budgeting (“e-musrenbang”)
- Local mass media and private sector collaboration in support of community mobilization green and safe public spaces
- A mobilized and informed city community in favor of longer term decision-making for sustainable urbanization of Surabaya and the surrounding region.

Surabaya city translates livability is translated as achieving a balance between a healthy living environment, equal access to public goods and services, and cultural preservation and revitalization. The existence of kampongs amidst dense new development provides a space for the informal sector to thrive and allow the lower-income society to remain at the heart of city.

Best Practice Case Study 2: Surakarta

Street Vendor Management in Solo: Building People's Economy

Background

Since the economic crisis of 1997, the growth of street vendors have been a major problem for the Surakarta local government. Street vendors were uncontrollable and occupied vacant land along the streets, sidewalks and invaded public parks. Besides disturbing traffic and creating traffic jams in some of the streets, street vendors were in eye sore to the Solo urban landscape.

The local government documents more than 5.000 street vendors. One the locations with the most number of street vendors was Monument 45 Banjarsari Park, known as Monjari Park. Monjari park was occupied by 989 street vendors. Various attempts to move the street vendors failed and in some occasions ended with conflict.

In 2005, the newly elected Mayor of Solo, Joko Widodo decided a different approach. The mayor's main program was to build the establish Surakarta to become a clean and beautiful city, by building the people's economy. Following advice of NGOs and the UNS research institute, the process of development became a key component. Inclusiveness and empowerment



Figure 1 Street Vendors occupying Monjari Park.(Source Bappeko Surakarta)

The Approach: building trust and communication

The local government recruited a research team from an NGO and the Universitas Nasional Sebelas Maret Surakarta to compile data on the number, types and issues of street vendors (or *Pedagang Kaki Lima*/PKL). In 2005 there were 5.817 street vendors of which the majority were temporary migrants. The distribution of street vendors were as follows: Kecamatan Banjarsari (2.526 PKL), diikuti Kecamatan Jebres (1.030 PKL), Kecamatan Pasar Kliwon (937 PKL), Kecamatan Laweyan (919 PKL), and Kecamatan Serengan (435 PKL). The types of street vendors vary, from food, drinks, clothing, kitchenware and homeware, automotive spareparts, CD/DVDs and electronics such as mobile phone and assesories.

Based on recommendations from the research team, the local government formulated two main approaches for managing street vendors: creating pockets for street vendors within the city, and creating new areas for street vendors. The four programs consisted of (1) relocation (if no land were available for a large number of street vendors);(2) *shelterknock-down*;(3) tents (only night in certain areas);(4) carts (for street vendors where no land is available); and (5) eviction (as the last step when vendors do not want to follow the setup program planned by the city government).

Based on the number of street vendors and necessity, the main priority was to relocate 989 street vendors at Monjari Park and restore the park for the public.

The major principle in all actions was to build better communication amongst the stakeholders. The local government promoted the program to the street vendors at Monjari Park through a number of gatherings and visits by the Mayor to the street vendors on site. Many of the visits were informal discussions or conversations with the street vendors to gain a better understanding of the concerns of the street vendors. A number of meetings were arranged at the City Hall and the Mayor's official home at Loji Gandrung. More than 50 meetings took place until the street vendors finally agreed to be relocated to a new market Klithikan Notoharjo Market in Semanggi area, Solo. A Memorandum of Understanding was signed by the Mayor with nine groups representing the 989 street vendors.

The benefits provided by the local government to the 989 street vendors among others were:

- Security of tenure and business sustainability
- Better business facilities
- Improvement of business status (from illegal to legal)
- Free business permits
- Management training, business capital assistance and bank guarantee loan
- Free promotion by the local government through the media (electronic media, newspapers), billboards and special events to promote the new market.

The local government also agreed to escort the street vendors to move to the new market in a traditional procession, referred to as *Kirab*.

***Kirab*: A New Life**

On 23 July 2006 the city of Solo held a traditional procession (*kirab*) from Monjari Park to the new market Pasar Klithikan Notoharjo. This event is quite rare since it is the first event for street vendors and the local government to dress up in traditional Javanese costumes. The street vendors each carried traditional rice cakes (locally referred to as *tumpeng*) to their new market. The procession symbolizes a new life or beginning for the street vendors. The mayor and deputy mayor also wore traditional Javanese costumes and rode on horses escorting the procession. Also in the procession were the palace guards, flag carriers, government officials and the local parliament. The procession also symbolized the beginning of a partnership between the local government and street vendors. The event was exposed in the media and became the pride of Solo citizens. One of the major achievements was that there was no violence during the whole process.

At the new market, all the street vendors participated in a lottery for their kiosk location. The market was divided into 18 zones based on the type of merchandise. After the lottery, each vendor, now referred to as *saudagar* (traders) signed an agreement with the market management to obey all the rules and not transfer their rights to the kiosk to a third party.



Figure 1 The Traditional Procession of *Kirab*. (Source: Bappeda Kota Surakarta)

Results and outcomes

The relocation of street vendors resulted in significant improvements to the lives of the new traders. Besides better working environment and facilities, the new market attracted more customers. Some clusters were able to increase their revenue to 200% and some even reached 400% compared to business activities at Monjari Park.

The local government received higher tax revenue from the traders and were able to gain back Monjari Park for public use.

The success of Monjari Street Vendor relocation was followed by success in other street vendor locations such as Manahan, Jalan Slamet Riyadi dan lain-lain. The street vendors that participated in the program also supported local tourism. Solo is well-known for its culinary tourism.



Figure 3 Taman Monjari can be enjoyed by the public. (source: Bappeko Solo)



Figure 4: Klithikan Notoharjo market (Source: Bappeda Kota Surakarta dan Solo Pos)

Sustainability

The Street Vendor Management Programme in Solo is an example of sustainable programme for the following reasons:

- Application of social investment in economic development
- Building better communication requires community participation
- Cost recovery of relocation
- Local government policies respect community and local traditions
- The success of the Monjari street vendor relocation is an example for street vendor management in other locations
- Street vendors support local tourism



Figure 5: Street vendors support tourism. (Source: Bappeko Surakarta)

Lessons learned

Four lessons learned from the Solo's experience:

1. Urban development can be implemented without forced evictions
2. Participatory development leads to more effective results
3. Good governance results in better urban environment
4. Budget allocation as investment

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Glossary

A		
ADIPURA	An award given for successful cities in Indonesia in managing and creating clean urban environment	
APBN	<i>Anggaran Pendapatan dan Belanja Negara</i>	National Revenue and Expenditure Budget
APBD	<i>Anggaran Pendapatan dan Belanja Daerah</i>	Local Revenue and Expenditure Budget
Arlindo	<i>Arus Lintas Indonesia</i>	Indonesian Through flow
ASDP	<i>Angkutan Sungai Danau dan Penyeberangan</i>	Transport Streams, Lakes, and Crossings
B		
Bapertarum - PNS	<i>Badan Pertimbangan Tabungan Perumahan untuk Pegawai Negeri Sipil</i>	Housing Savings Board for Civil Servants
Bappenas	<i>Badan Perencanaan Pembangunan Nasional</i>	National Development Planning Agency
Bapepam LK	<i>Badan Pengawas Pasar Modal dan Lembaga Keuangan</i>	Supervisory Agency for Capital Market and Financial Institution
BBG	<i>Bahan Bakar Gas</i>	Gas Fuel
BBM	<i>Bahan Bakar Minyak</i>	Fossil Fuel
BBNKB	<i>Bea Balik Nama Kendaraan Bermotor</i>	Tariff on Transfer of Motor Vehicle Title Fee
BKIA	<i>Badan Kesehatan Ibu dan Anak</i>	Mother and Child Health Bureau
BKPRN	<i>Badan Koordinasi Penataan Ruang Nasional</i>	National Coordinating Board for Spatial Planning
BKSP	<i>Badan Kerja Sama Pembangunan</i>	Development Cooperation Agency
BI	<i>Bank Sentral Republik Indonesia</i>	
BMKG	<i>Badan Meteorologi, Klimatologi, dan Geofisika</i>	Indonesian Agency for Meteorological, Climatological and Geophysics
BNPB	<i>Badan Nasional Penanggulangan Bencana</i>	National Disaster Management Agency
BPBD	<i>Badan Penanggulangan Bencana Daerah</i>	Local Disaster Management Agency
BPHTB	<i>Bea Perolehan Hak atas Tanah dan Bangunan</i>	Tariff on Right Acquisition for Land and Building
BPJS	<i>Badan Penyelenggara Jaminan Sosial</i>	Social Security Agency
BPN	<i>Badan Pertanahan Nasional</i>	National Land Agency
BPS	<i>Badan Pusat Statistik</i>	Statistics Indonesia
BRT	Bus Rapid Transportation	
BTN	<i>Bank Tabungan Negara</i>	National Savings Bank
C		
CAP	Community Action Plan	
CoBILD	Community-based Initiatives for Housing and Local Development	
CSO	Civil Society Organization	
CSR	Corporate Social Responsibility	
D		
DAK	<i>Dana Alokasi Khusus</i>	Specific Allocation Fund ? OK
DAU	<i>Dana Alokasi Umum</i>	General Fund Allocation
Dana		Balancing budget

Perimbangan		
DBH	<i>Dana Bagi Hasil</i>	Revenue Sharing Fund
DKI	<i>Daerah Khusus Ibukota</i>	Special Capital Region of Jakarta
E		
ERK	<i>Efek Rumah Kaca</i>	Greenhouse effect
ESDM	<i>Energi dan Sumber Daya Mineral</i>	Energy and Mineral Resources
F		
FOBI	<i>Forum Outsourcing Bank Indonesia</i>	
G		
GHG	<i>Gas rumah kaca (GRK)</i>	Greenhouse Gas
H		
HDI	Human Development Index	
I		
ICT		
IKB	<i>Indeks Keberlanjutan</i>	Sustainability Index
Inpres	<i>Instruksi Presiden</i>	President's Instruction
IOD	Indian Ocean Dipole	
J		
Jabodetabekjur	<i>Jakarta – Bogor – Depok – Tangerang – Bekasi – Cianjur</i>	
JFP	<i>Jabatan Fungsional Perencana</i>	Functional Planner Position
JKN	<i>Jaminan Kesehatan Nasional</i>	National Healthcare Insurance
K		
Kartamantul	<i>Yogyakarta – Sleman – Bantul</i>	
KB	<i>Keluarga Berencana</i>	Family Planning
KBI	<i>Kawasan Barat Indonesia</i>	West Region of Indonesia
Kemenpera	<i>Kementerian Perumahan Rakyat</i>	Ministry of Housing
Kemen PU	<i>Kementerian Pekerjaan Umum</i>	Ministry of Public Works
Kepres	<i>Keputusan Presiden</i>	Presidential Decree
KHA	<i>Konvensi Hak Anak</i>	Child Right Convention
KIP	Kampung Improvement Program	
KLA	<i>Kota Layak Anak</i>	Livable City for Children
Komnas HAM	<i>Komisi Nasional Hak Asasi Manusia</i>	National Commission for Human Rights
KPPOD	<i>Komite Pemantauan Pelaksanaan Otonomi Daerah</i>	Monitoring Committee for the Implementation of Regional Autonomy
KPR	<i>Kredit Pemilikan Rumah</i>	Credit for Home Ownership
KRA	<i>Kota Ramah Anak</i>	Child Friendly City
KSN	<i>Kawasan Strategis Nasional</i>	National Strategic Region
KSPPN	<i>Kebijakan dan Strategi Pembangunan Perkotaan Nasional</i>	National Urban Development Policy and Strategy
KTI	<i>Kawasan Timur Indonesia</i>	East Region of Indonesia
L		
LED	Light Emitting Diode	
LPG	Liquid Petroleum Gas	
LP2B	<i>Lahan Pertanian Pangan Berkelanjutan</i>	Sustainable Food-Crop Agricultural Land
LPS	<i>Lembaga Penjamin Simpanan</i>	Savings Guarantor Institution
LRT	Light Rail Transit	
LSM	<i>Lembaga Swadaya Masyarakat</i>	Non-Government Organization
M		
MBR	<i>Masyarakat Berpenghasilan Rendah</i>	Low Income People
MDG's	Millenium Development Goals	
MP3EI	<i>Master Plan Percepatan dan Perluasan</i>	Master Plan for Acceleration and

	<i>Pembangunan Ekonomi Indonesia</i>	Expansion of Indonesia's Economic Development
MP3KI	<i>Masterplan Percepatan dan Perluasan Pengurangan Kemiskinan Indonesia</i>	Master Plan for Acceleration and Expansion of Indonesia's Poverty Alleviation
MRT	Mass Rapid Transportation	
Musrenbang	<i>Musyawaharah Perencanaan Pembangunan</i>	'Deliberated' Development Plan
N		
NCICD	National Capital Integrated Coastal Development	
NDP	Neighborhood Development Plan	
NGO	<i>Non – Government Organization</i>	
NKRI	<i>Negara Kesatuan Republik Indonesia</i>	Unitary State of Republic of Indonesia
NSPM	<i>Norma, Standar, Prosedur, Manual</i>	Norm, Standard, Procedure, Manual
NUSSP	Neighborhood Upgrading and Shelter Sector Project	
O		
OJK	<i>Otoritas Jasa Keuangan</i>	Financial Service Authority
OMS	<i>Organisasi Masyarakat Sipil</i>	Civil Society Organization
P		
PAD	<i>Pendapatan Asli Daerah</i>	Locally Generated Revenue
Pamsimas	<i>Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat</i>	Community-based Drinking Water and Sanitation Provision
PBB	<i>Perserikatan Bangsa-Bangsa</i>	United Nations
PBB	<i>Pajak Bumi dan Bangunan</i>	Property Tax
PBB-P2	<i>Pajak Bumi dan Bangunan sector Pedesaan dan Perkotaan</i>	Property Tax for Urban and Rural Sector
PDAM	<i>Perusahaan Daerah Air Minum</i>	Regional Water Utility Company
PDB	<i>Produk Domestik Bruto</i>	Gross Domestic Product
PDRD	<i>Pajak Daerah dan Retribusi Daerah</i>	Local Tax and Retribution
Pemda	<i>Pemerintah Daerah</i>	Local Government
Perda	<i>Peraturan Daerah</i>	Local Regulation
Permendagri	<i>Peraturan Menteri Dalam Negeri</i>	Regulation of Ministry of Home Affairs
Perum	<i>Perusahaan Umum Perumahan Nasional</i>	National Housing and Urban Development Corporation
Perumnas		
PKB	<i>Pajak Kendaraan Bermotor</i>	Motor Vehicle Tax
PKH	<i>Program Keluarga Harapan</i>	Family Hope Programme
PKL	<i>Pusat Kegiatan Lokal</i>	Local Activity Center
PKN	<i>Pusat Kegiatan Nasional</i>	National Activity Center
PKW	<i>Pusat Kegiatan Wilayah</i>	Regional Activity Center
PLEA	Passive Low Energy Architecture	
PLN	<i>Perusahaan Listrik Negara</i>	State Electricity Company
PLP2K-BK	<i>Penanganan Lingkungan Perumahan dan Permukiman Kumuh Berbasis Kawasan</i>	Area-based Slum Housing and Settlement Upgrading
PMA	<i>Penanaman Modal Asing</i>	Foreign Capital Investment
PMDN	<i>Penanaman Modal Dalam Negeri</i>	Domestic Capital Investment
PNPM	<i>Program Nasional Pemberdayaan Masyarakat</i>	National Program for Community Empowerment
PTSP	<i>Pelayanan Terpadu Satu Pintu</i>	One Stop Service
PPNS	<i>Penyidik Pegawai Negeri Sipil</i>	Civil Servant Investigator

P2BPK	<i>Pembangunan Perumahan Bertumpu Pada Kelompok</i>	Community Based Housing Development
P2KP	<i>Program Penanggulangan Kemiskinan di Perkotaan</i>	Urban Poverty Management Program
P2KH	<i>Program Pengembangan Kota Hijau</i>	Green City Development Program
P3KP	<i>Program Penataan dan Pelestarian Kota Pusaka</i>	Heritage City Conservation and Management
Prona	<i>Program Sertifikasi Nasional</i>	National Program on Land Certification
PUG	<i>Pengarasutamaan Gender</i>	Gender Mainstreaming
Pusbindiklatren	<i>Pusat Pembinaan Pendidikan Pelatihan Perencanaan</i>	The Center for Planners Development, Education, and Training
R		
RAN API	<i>Rencana Aksi Nasional Adaptasi Perubahan Iklim</i>	National Action Plan for the Adaptation of Climate Change
RDTR	<i>Rencana Detail Tata Ruang</i>	Detailed Spatial Plan
RPJMD	<i>Rencana Pembangunan Jangka Menengah Daerah</i>	Local Mid-Term Development Plan
RPJMN	<i>Rencana Pembangunan Jangka Menengah Nasional</i>	National Mid-Term Development Plan
RPJPN	<i>Rencana Pembangunan Jangka Panjang Nasional</i>	National Long-Term Development Plan
RSDK	<i>Rehabilitasi Sosial Daerah Kumuh</i>	Slum Area Social Rehabilitation
Rusunami	<i>Rumah Susun Milik</i>	Owner-Occupied Apartment
Rusunawa	<i>Rumah Susun Sewa</i>	Rental Apartment
RTBL	<i>Rencana Tata Bangunan dan Lingkungan</i>	Building and Environmental Plan
RTH	<i>Ruang Terbuka Hijau</i>	Green Open Space
RTRW	<i>Rencana Tata Ruang Wilayah</i>	National Spatial Plan
RTRWK	<i>Rencana Tata Ruang Wilayah Kota</i>	Municipal Spatial Plan
RTRWKab	<i>Rencana Tata Ruang Wilayah Kabupaten</i>	Regency Spatial Plan
RTRWP	<i>Rencana Tata Ruang Wilayah Provinsi</i>	Provincial Spatial Plan
RWH	<i>Rain Water Harvesting</i>	
S		
Sanimas	<i>Sanitasi berbasis masyarakat</i>	Community-based sanitation
SARA	<i>Suku, Agama, dan Ras</i>	Ethnic, Religion, and Race
SDM	<i>Sumber Daya Manusia</i>	Human Resources
SMF	<i>Sarana Multigriya Finansial</i>	Secondary Mortgage Corporation
SP	<i>Sensus Penduduk</i>	Population Census
SPM	<i>Standar Pelayanan Minimum</i>	Minimum Service Standard
SPN	<i>Sistem Perkotaan Nasional</i>	National Urban System
SPP	<i>Standar Pelayanan Perkotaan</i>	Urban Service Standard
STBM	<i>Sanitasi Total Berbasis Masyarakat</i>	Community-based Total Sanitation
SUSENAS	<i>Survey Sosial Ekonomi Nasional</i>	National Social Economic Survey
U		
UDGL	<i>Urban Design Guidelines</i>	
UGM	<i>Universitas Gajah Mada</i>	Gajah Mada University
UHI	<i>Urban Heat Island</i>	
Uji Kir	<i>Assessment to check whether the motor vehicle parts meet the technical requirements</i>	
UNESCAP	<i>United Nations Economic and Social Commission for Asia and the Pacific</i>	

UNESCO *United Nations Educational, Scientific and Cultural Organization*
UNFCC *United Nations Framework Convention on Climate Change*
UU *Undang-Undang* Law