

Rural-Urban Linkages: Indonesia Case Study

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Rural-Urban Linkages: Indonesia Case Study

I. DEFINITIONS

Definitions of Urban

1.1 The definitions of urban and rural greatly varies from country to country, making generalizations problematic and international comparisons on urbanization difficult (Tacoli, 1998; Cohen, 2004). In Indonesia, there are two alternative definitions of “urban”: one is administrative, in which local government units (*Kota*) are given official status as municipalities. The other is functional, where each of the smallest administrative units (village or *desa*) is given a functional urban or rural status according to their own characteristics (Firman, 2007).

1.2 Definitions of “urban” in Indonesia have not remained fixed making intercensal comparison rather difficult. In the 1961 census, urban areas comprised, first, village located in municipalities, second, village located in the capital city of district; third, having 80 percent or more population working in non agriculture sector, although village is not located in municipality and/or the capital city of district. The 1971 census extended two criteria of having 50 percent or more population working in non agriculture sector and at least has three urban facilities (hospital/clinic, school and electricity). In the 1980 and 1990 censuses, a locality defined as ‘urban’ when it meets 3 (three) requirements: first, having a population density of 5,000 people or more per square kilometer; second, having 25 percent or less of households working in the agricultural sector; third, having eight or more kinds of urban facilities. In the 2000 and 2010 censuses, technical scoring system to categorize a locality as ‘urban’ was used and applied for each criteria such as: population density, percentage of household working in agriculture sector had and urban facilities.

Table 1. Changes of Urban and Rural Criteria in Indonesia

Year	Criteria of urban area
The 1961 Population Census	Village classified as urban area if fulfill one of these three following criteria: i) located in municipality ii) located in the capital city of district iii) More than 80 percent of population working in non agriculture sector, although rural area is not located in municipality and/or the capital city of district
The 1971 Population Census	Village classified as urban area if fulfill one of these four following criteria: i) located in municipality

	<ul style="list-style-type: none"> ii) located in the capital city of district iii) More than 80 percent of population working in non agriculture sector iv) More than 50 percent of population working in non agriculture sector and at least has three urban facilities (hospital/clinic, school and electricity)
The 1980 and 1990 Population Censuses	<p>There was a progressive change which the indicators of location were not longer be used. Scoring technique was applied for each variables: population density per square km, percentage of household working in agriculture sector and the availability of urban facilities. Based on the above indicators, village classified as urban if fulfill these following criteria:</p> <ul style="list-style-type: none"> i) having a population density of 5,000 people or more per square kilometer ii) having 25 per cent or less of the households working in the agricultural sector iii) having eight or more kinds of urban facilities.
2000 and 2010 Population Censuses	<p>There were some changes on urban definition which the variables of population density and percentage of household working in agriculture sector had been modified in term of scoring system. The fundamental change was also applied for urban facilities scoring sytem by using the accessibility to the facilities. Village classified as urban area if fulfill these following criteria:</p> <ul style="list-style-type: none"> i) in areas that have a population density of 5,000 persons per square kilometer; ii) area in which 25 percent or less of the households work in the agricultural sector; and iii) areas in which there are eight or more specific kinds of urban facilities, including primary school or equivalent; juniot high schools or equivalent; senior high schools or equivalent; cinemas; hospitals; maternity hospitals/mother-child hospitals; primary health care centre; roads that can accomodate three and four wheeled motorized vehicles; telephones; post offices; markets with buildings; shopping centres; banks; factories; restaurants; public electricity and part equipment rental services.

Source: adopted from the Draft National Report on Habitat 2014, Urban Demography

The urbanization in Indonesia as well as in Southeast Asia is also characterized by the blurred distinction between 'rural' and 'urban'. Both agricultural and non-agricultural activities take place side by side in the adjacent areas of the urban centers, while the urban physical development extends beyond city administrative boundaries.

Improvement in transport and communication have brought urban and rural areas much closer together. It made easier for people living in the rural and urban fringe areas to commute to the urban areas where they can be involved in typically urban occupations. In addition, companies are relocating some labour intensive-manufacturing plants to the rural areas encouraged by deconcentration policies of the government and resulting in factories in the middle of rice-fields (Kio Sheng, 2005). These policies are actually linked with the deregulation policy in the sectors of industry and finance during the mid-1980s to mid-1990s. The deregulation policy is essentially an economic policy which was basically to simplify procedures and regulations in businesses and not intended as an intervention in urban development and urbanization (Firman, 2007). Within this policy, the Mayor/Head of District has a significant role in issuing location and development permits for property and industrial estate development especially in the city/district surrounding metropolitan and large cities such as: Jakarta Metropolitan Areas (JMR) and Surabaya Metropolitan Region.

1.3 McGee (1995) labels this phenomenon ‘mega-urbanization’ (Firman, 2007), whereas in his earlier work he calls this phenomenon ‘Kotadesasi’¹ a phrase coined from the Indonesian language (Bahasa Indonesia) meaning process of socioeconomic and physical integration between urban areas (*perkotaan*) and rural areas (*perdesaan*). The process occurs in many different locations with a radius as large as 100 kilometres and involves an intense mixture of land use with agriculture, cottage industries, industrial estates, suburban developments and other uses existing side by side, as well as the extreme mobility and fluidity of the population, including commuting and the movement of goods within the region

Box 1. Scoring Analysis for Urban Indicators (Central Bureau of Statistic)

Indonesia Central Bureau of Statistic (BPS) defines urban as status of a urban village (kelurahan) which satisfies the criteria for classification of urban areas: population density, percentage of agricultural households and number of urban facilities.

Population density (person per km ²)	Score	Percentage of agricultural households	Score	Urban Facilities	Criteria	Score
< 500	1	> 70	1	Kindergarten	Available, or ≤ 2.5 km > 2.5 km	1
500 – 1249	2	50-69.99	2	Junior High School		
1250 – 2499	3	30-49.99	3	Senior High School		
						0

¹ Authors’ notes: There is no data on “kotadesasi” population. We have to measure the populaiton of “kotadesasi” or desa perkotaan – the urban village (administratively it is under the District authority but has urban function). But if we refers to Table 3, there is a population of 67,9 million in District Capital Towns. If the kotadesasi or Desa Perkotaan is approximately about 30% from District Capital Towns, it is estimated the number of population is about 20.4 million people in Kotadesasi area in 2010.

2500 – 3999	4	20-29.99	4	Market	Available, or ≤ 2 km	1
4000 – 5999	5	15-19.99	5	Shops	> 2 km	0
6000 – 7499	6	10-14.99	6	Cinema	Available, or ≤ 5 km	1
7500 – 8499	7	5-9.99	7	Hospital	≥ 5 km	0
> 8500	8	< 5	8	Hotel/Biliard pool/disco/beauty shop	Available Not available	1 0
Urban, total score ≥ 10				Percentage of household with telephone	≥ 8.00 < 8.00	1 0
Rural, total score < 10				Percentage of household with electricity	≥ 90.00 < 90.00	1 0

Source: Head of Indonesia Central Bureau of Statistic Decree, for Urban Rural Classification, 2010

Functional Urban Areas

1.4 As mentioned earlier that traditional definitions of urbanization using Government's definitions and administrative boundaries are varied from one country to another because there is no standardized definition of urban and rural. This situation is particularly troublesome if it is used for a cross country analysis or determine the aggregate urbanization status of the regions. In the face of the diverse urban definitions, international reporting and comparisons of urban populations does elicit a degree of conformity, but the differences can be misleading (McGranahan, 2014). As the resolution and availability of remote sensing improves, it will become increasingly easy to apply standard demographic definitions, independent of administrative functions. Attempts to develop and apply more internationally comparable demographic definitions of urban are already being made. A step in this direction was taken for the World Bank's World Development Report 2009 (Uchida and Nelson 2010; World Bank 2009). The resulting adjustments suggest that part of the explanation for Asia not being much more urban than Africa, despite higher incomes per capita, is that some of the key countries including India have relatively restrictive definitions of what is urban.

1.5 In case of Indonesia, the World Bank Office Jakarta (WB, 2011) adopted and modified a functionally based definition to measure urban concentration called an agglomeration index (AI) for applicability to the Indonesian context. This method uses three factors: population density, the population of a large urban centre and travel time to that large urban centre. Using a population threshold of 50,000 to define the central city; a population density of 700 persons per square kilometer for Java and 200

for other islands; a 90 minutes commute for Jakarta and 60 minutes for other agglomerations across the country.

1.6 Using the Agglomeration Index method, this study identifies 44 metropolitan regions of which 21 are comprised of multi-districts (kabupaten/kota) regions and others are comprised of a single city (kota). The majority of these agglomeration areas are located in Java, Bali and Sumatra, in which islands most of the urban population now resides. In other islands, the study identifies only a limited numbers of agglomeration areas. There is only one agglomeration (Jayapura) on the vast island of Papua and also only one in the Maluku archipelago, while Kalimantan and Sulawesi have five and six agglomeration areas, respectively. In terms of size of population, Indonesia has two megacities with populations of more than 10 million population (Jakarta and Surabaya), four metropolitan areas with populations in the range of 5 – 10 million, 13 metropolitans with populations in the range of 1 – 5 million, eight medium-sized metropolitan areas with populations in the range of 0.5 – 1 million and 17 small-cities with populations in the range of 50,000 – 0.5 million.

Table 2. Indonesian Agglomerations, Population 1996-2007

AI Name	Population				
	1996	1999	2002	2005	2007
Jakarta	17,771,825	24,087,455	23,925,397	25,795,949	26,750,001
Surabaya	7,563,077	9,690,650	9,851,508	10,364,636	10,501,043
Bandung	4,643,009	6,067,916	6,478,492	6,983,461	7,156,927
Yogyakarta	4,840,456	6,017,350	6,345,099	6,536,464	6,653,353
Cirebon	4,448,249	5,892,488	6,113,864	6,410,264	6,451,311
Semarang	3,640,644	4,713,515	4,878,561	5,016,351	5,049,775
Medan	3,090,761	2,254,265	4,216,854	4,432,717	4,634,417
Kediri	3,034,169	3,699,737	3,716,133	3,869,799	3,829,444
	2,204,073	2,994,265	3,103,484	3,227,247	3,152,589
Mataram	1,934,520	2,747,941	2,912,095	2,927,341	3,038,078
Surakarta	2,320,839	2,888,353	2,930,166	3,074,990	2,995,529
Makassar	1,653,147	2,201,438	2,240,979	2,313,244	2,378,334
Bandar Lampung	2,115,166	2,641,552	1,927,206	2,032,144	2,153,552
Padang	1,225,900	1,681,048	1,567,594	1,715,324	1,788,924
Tegal	1,233,268	1,668,301	1,648,116	1,720,655	1,648,185
Denpasar	922,205	1,164,113	1,324,885	1,384,640	1,431,525
Palembang	1,068,496	1,426,335	1,512,424	1,338,539	1,396,823
Tanjung Balai	793,043	418,943	1,148,347	1,177,572	1,211,994
Payakumbuh	767,416	1,090,913	972,931	1,032,143	1,022,116
Malang	648,424	813,164	766,867	780,445	810,651
Madiun	682,457	805,026	774,668	804,635	799,756
Pekan Baru	440,808	597,230	660,229	707,120	781,126
Banjarmasin	431,230	558,550	539,060	574,259	616,018
Manado	406,846	538,456	536,287	592,131	596,134
Samarinda	422,206	602,406	543,713	576,744	593,827
Pontianak	361,713	478,136	482,890	494,384	513,315
Balikpapan	337,185	442,060	421,177	434,127	501,150

Jambi	332,770	435,821	431,709	460,427	458,226
Pare-Pare	276,429	348,668	339,289	344,513	342,625
Sukabumi	106,029	235,163	261,861	308,595	311,496
Palu	188,994	256,914	275,186	287,576	303,547
Kupang	-	228,386	254,053	268,828	284,895
Bengkulu	204,028	313,190	304,188	275,418	268,276
Ambon	250,296	328,806	178,084	232,448	256,887
Kendari	-	173,040	211,881	227,190	251,725
Pematang Siantar	184,938	238,518	246,739	229,158	234,416
Probolinggo	158,435	198,839	193,816	203,368	221,916
Banda Aceh	234,004	239,751	220,593	177,744	219,336
Jayapura	144,123	202,320	170,158	201,752	214,991
Tarakan	-	-	125,988	157,818	175,038
Gorontalo	106,190	138,886	137,650	156,390	160,360
Pangkal Pinang	99,143	140,374	127,942	154,876	154,830
Tebing Tinggi	102,672	138,180	126,570	135,252	139,428
Sibolga	57,125	81,312	83,991	89,692	90,618
Total Agglomerations	71,446,308	91,879,774	95,228,724	100,228,370	102,544,507
Small kota	1,937,781	2,164,208	3,134,664	3,364,552	3,490,274
Urban areas	73,384,089	94,043,982	98,363,388	103,592,922	106,034,781
Rural Areas	81,100,919	111, 580,373	105,862,085	117,229,974	120,037,139
Total Population (urban and Rural)	154,485,008	205,624,455	204,225,473	220,822,896	226,071,920

Source : World Bank, 2011 calculated From SUSENAS 1996 – 2007, BPS

City as Administrative Region.²

1.7 Although the debates on urban and rural definitions have been taking place for so many years, however, those method is not being used by Government of Indonesia in measuring urban and rural population. In fact, urban and rural population data are based on traditional estimates of urbanization trends by using Government's definitions and administrative boundaries are still used in the formulation of National Urban Development Policy and Strategy (KSPN, 2013). The National Development Planning Board (Bappenas) used three administrative categories of urban areas referred to the Law No. 32/2004 on Local Governance (administrative decentralization). These include: i) urban areas as autonomous regions (known as city governments; ii) urban areas within district boundaries (district capital towns); and iii) urban areas spilling over into one or more adjacent administrative areas. In legal terms of administrative regions, Indonesia has 33 provinces, 98 autonomous city governments³ and 399 district governments.

² GoI uses the term Regional Government (*Pemerintah Daerah*) for sub-national governments, including Provinces (*Provinsi*), and below that local governments that comprise Cities (*Kota*), and Districts (*Kabupaten*). Cities and Districts have the same administrative status and a similar government apparatus, the difference being mainly that Regencies/Districts have a preponderantly rural economy.

³ Central Jakarta has fewer than 1 million inhabitants and is therefore not classified as Metropolitan but as Large.

1.8 In addition, the National Development Planning Board's (*Bappenas*) also classified the autonomous cities (*Kota*) based on population size referring to the urban area's classification in Law No. 26/2007 on Spatial Planning. These include following categories: i) Metropolitan city with the population above 1 (one) million, ii) Large City with the population between 500,000 to 1 million, iii) Medium city with the population between 100,000 to 500,000 and iv) Small city with population between 50,000 to 100,000. Thirty-four of the *Kota* listed were established in the period since decentralization (1999-2009), and their number is likely to increase in the future as a result of continued upgrading of district capital towns (*Ibukota Kabupaten - IKK*) to cities (*Kota*) in order to provide them with an administrative apparatus commensurate with their population size and economic importance, thus separating them from their former districts. The number of *IKK* may also increase as a result of further subdivision of districts. Their numbers and classification in terms of population size can be seen in Table 2.

Table 3: *Bappenas* classification of urban areas and population distribution in 2010

No	Classification	Population	Nº	Pop. Combined	%
1	Metropolitan Cities	More than 1 million	14	27,396,616	11.5
2	Large Cities	Between 500,000 and 1 million	16	11,378,527	4.8
3	Medium Cities	Between 100,000 and 500,000	57	11,151,756	4.7
4	Small Cities	50,000 to 100,000	11	491,261	0.2
		Kota total	98	50,418,160	21.2
5	District capital towns	total	399	67,902,096	28.6
		Urban areas total	497	118,320,256	49.8

Source: Adapted and elaborated from *Bappenas KSPN 2011 and BPS Data 2012*

Note: District capital towns are urban areas located in District Administrative Regions.

Definitions of Village (*Desa*) and Rural Area (*Kawasan Perdesaan*)

1.9 There are two terms in Indonesia related to rural (*kawasan, perdesaan*) and village (*Desa*) as mentioned in Law No. 6/2014 on Village (*Desa*) and Law No. 26/2007 on Spatial Planning⁴. Rural defines as an area which has agriculture as main economic activity including natural resource management with the structure of function area for rural settlement, government and social services and economic activity. While, Village and Customary Village (rural neighborhood) define as the legal administrative region which has autonomous authorities to regulate and manage their own government administrative and community interest based on the initiative of local community, the voice right and/or traditional right under the jurisdiction of Government of Indonesia. The village government is lead by the head of village who is directly elected by local

⁴ GoI uses the term Regional Government (*Pemerintah Daerah*) for sub-national governments, including Provinces (*Provinsi*), and below that local governments that comprise Cities (*Kota*), and Districts (*Kabupaten*). Cities and Districts have the same administrative status and a similar government apparatus, the difference being mainly that Regencies/Districts have a preponderantly rural economy.

community. The distribution of rural village (Desa) in Indonesia based on Village Potency Data 2005 and 2011 can be seen in Table 4.

Table 4. Distribution of Rural Village (Desa) in Indonesia 2005-2011

Region	2005				2011			
	Within the region (%)			% to national	Within the region (%)			% to national
	Least developed (Tertinggal)	Developing (Berke mbang)	Self-Developed (Mandiri)		Least developed (Tertinggal)	Developing (Berke mbang)	Self-Developed (Mandiri)	
Sumatera	18.3	71.1	10.5	30.3	22.8	67.9	9.3	33.3
Jawa and Bali	1.5	73.3	25.1	37.1	1.8	53.8	44.4	31.8
Nusa Tenggara	17.9	72.5	9.5	5.0	55.6	37.6	6.9	5.0
Kalimantan	13.9	76.5	9.5	8.9	49.0	43.5	7.5	8.5
Sulawesi	7.3	82.9	9.9	11.7	28.8	61.4	9.8	12.2
Maluku	22.3	72.5	5.2	2.3	64.7	32.2	3.1	2.6
Papua	51.9	45.9	2.2	4.7	89.5	9.8	0.7	6.6
Nasional	12.1	72.7	15.2	100	26.2	54.3	19.5	100
Number of Village at national	8.445	50.873	10.635	69.953	20.939	43.391	15.609	79.939
Western Part of Indonesia	9.1	72.4	18.5	67.4	12.3	60.8	26.9	65.1
Eastern Part of Indonesia	18.2	73.5	8.3	32.6	57.5	36.9	5.6	34.9

Source: Village Potency 2005 and 2011

Note: Number of Village includes urban villages (Kelurahan)

II. DEMOGRAPHY

Urbanization Trend in Indonesia

2.1 Indonesia is one the largest archipelagic countries in the world, with five major Islands namely Sumatra, Java, Kalimantan, Sulawesi and Papua. The population reached 238.5 million people in 2010 and is estimated to have been close to 305.6 million by 2035 (BPS, Bappenas and UNFPA, 2014), which makes the country the fourth most populous in the world. The population distribution in Indonesia is highly uneven, where about sixty per cent of the population is concentrated in Java, which comprises about seven per cent of the total land area. Compared to the total population of 203.4 million in 2000, this represents an increase of approximately 35 million people in ten years, constituting a growth rate of 1.49 percent.

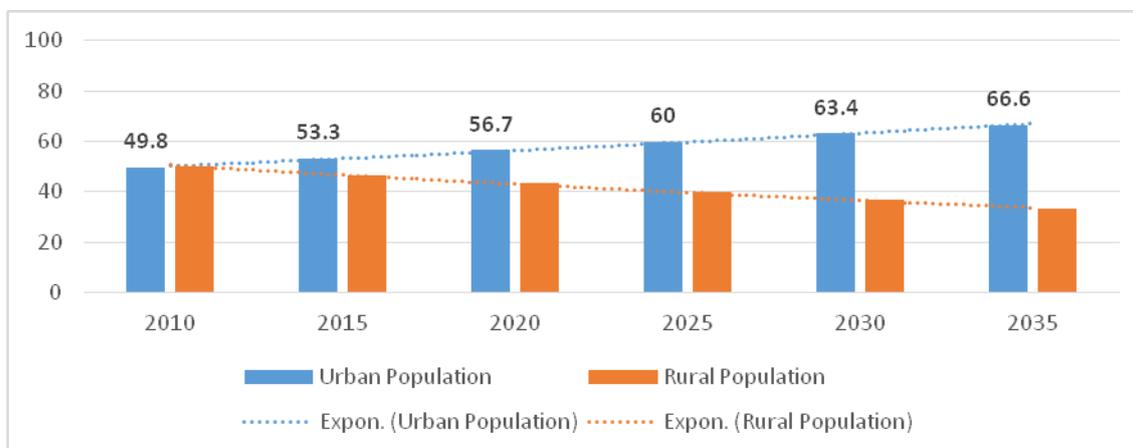
2.2 Indonesia has experienced rapid urban population growth in last decade and continues to grow in the next 20 years. Between 1990 and 2010, the urban population has more than doubled from 56 million to around 128 million. Indonesia urban population grew by 2.75% each year from 2000 to 2010. It is projected that urban population will reach around 66.6% by 2035 (ibid), while 3.4 million will be added annually to urban population between 2010 and 2035. Three factors that cause urbanization are: natural population growth (35-40 percent), rural-urban migration (25-30 percent) and the reclassification of rural into urban area (30-40 percent).

Table 5 - Urban and Rural Populations in Indonesia

Year	Urban Population ¹ (in millions)	Rural Population (in millions)	Total Population (in millions)	% of Population Living in Urban Areas
1971	20.5	98.9	119.4	17.2
1980	32.8	114.1	146.9	22.4
1990	55.5	123.8	179.3	30.9
2000	85.8	117.7	203.5	42.2
2010	118.3	119.3	237.6	49.8

Source: BPS, 2010

Figure 2. Trend of Urbanization 2010-2035



Source: BPS, Bappenas, UNFPA, 2014

Distribution of Urban Population in Provinces

2.3 The share of urban population in Indonesia has steadily increased since 1971, that is, almost 14.9% in 1971 and 49.8% in 2010. However, as mentioned in previous section, urbanization trend in Indonesia should be carefully analyzed due to differences in the definition of urban among population censuses. In order to get the comparable urbanization trend among provinces, it can be done by using urban population data in the last censuses, 2000 and 2010, which have been used the same definition of urban.

2.4 Based on population censuses 2000 and 2010 data, the proportion of urban population in Java's provinces is significantly higher than other provinces outside Java's island. Jakarta is totally urbanized and other provinces are also highly urbanized area such as: West Java and Yogyakarta. Nevertheless, the proportion of urban population in some provinces outside Java is significantly higher than the national rate, including North Sumatra (49.2%), Bangka-Belitung (49.2%), East Kalimantan (63.2%), and Bali (60.2%). The Province of North Sumatra is a huge exporter of agricultural plantation produce, whereas East Kalimantan is natural resource rich region, notably oil and gas. Bali is one of the most frequented tourism areas in the world.

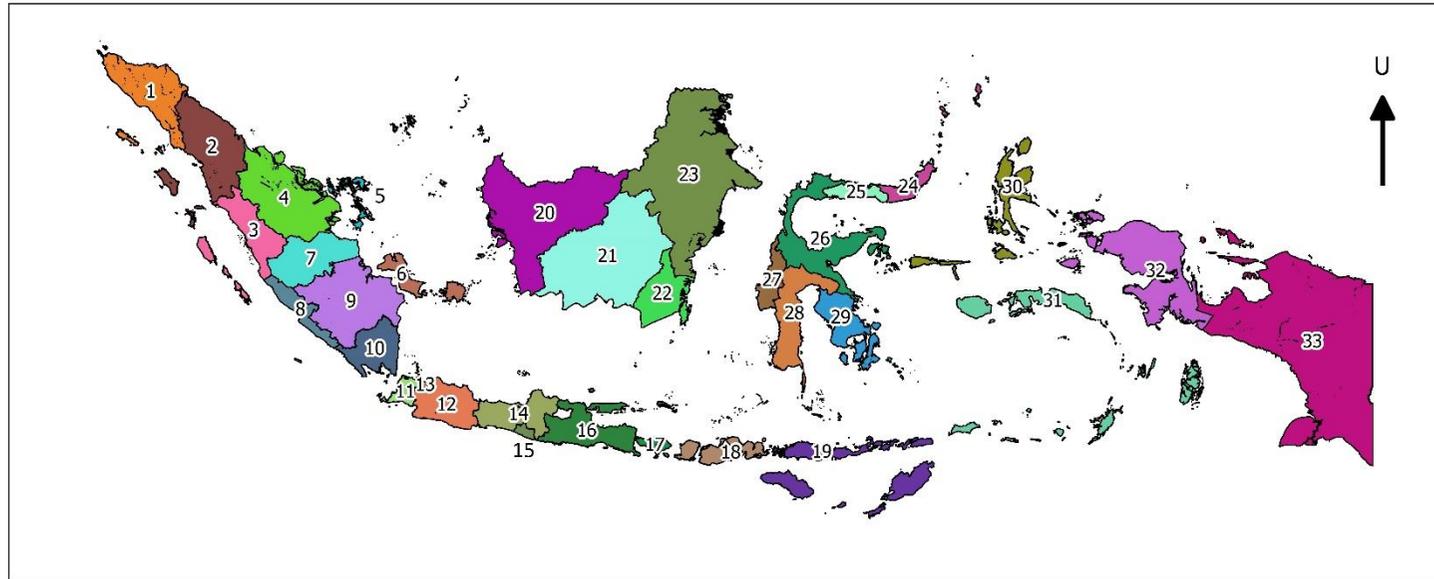
Table 6. Percentage of Urban Population in Provinces 1971-2010

Province	1971	1980	1990	2000	2010
Nangroe Aceh Darussalam	8,4	8,94	15,81	27,99	28,1
Sumatra Utara	17,2	25,45	35,48	42,64	49,2
Sumatra Barat	17,0	12,71	20,22	28,93	38,7
Riau	13,3	27,12	31,67	43,30	39,2
Jambi	29,1	12,65	21,41	28,33	30,7
Sumatra Selatan	27,0	27,37	29,34	34,46	35,8
Bengkulu	11,7	9,43	20,37	29,42	31,0
Lampung	9,8	12,47	12,44	21,23	25,7
Bangka Belitung				43,02	49,2
Kepulauan Riau					82,8
DKI Jakarta	100,0	93,36	99,62	100,0	100,0
Jawa Barat	12,4	21,02	34,51	50,31	65,7
Jawa Tengah	10,7	18,74	26,98	40,19	45,7
DI Yogyakarta	16,3	22,08	44,42	57,64	66,4
Jawa Timur	14,5	19,60	27,43	40,88	47,6
Banten				52,17	67,0
Bali	9,8	14,71	26,43	49,74	60,2
Nusa Tenggara Barat	8,1	14,07	17,12	35,08	41,7
Nusa Tenggara Timur	5,6	7,51	11,39	15,46	19,3
Kalimantan Barat	11,0	16,77	19,96	26,39	30,2
Kalimantan Selatan	12,4	10,30	17,56	28,14	42,1
Kalimantan Tengah	26,7	21,35	27,06	36,22	33,5
Kalimantan Timur	39,2	39,84	48,78	57,75	63,2
Sulawesi Utara	19,5	16,76	22,78	36,64	45,2
Sulawesi Tengah	5,7	8,95	16,43	19,98	24,3
Sulawesi Selatan	18,2	18,08	24,53	29,62	36,7
Sulawesi Tenggara	6,3	9,34	17,02	21,05	27,4
Gorontalo				25,53	34,0
Sulawesi Barat					22,9
Maluku	13,3	10,84	18,97	25,22	37,1
Maluku Utara				30,71	27,1
Papua Barat					29,9
Papua	16,3	20,22	23,97	24,90	26,0
Indonesia	14,8	17,4	30,90	42,43	49,8

Sumber: BPS (1997); BPS (2001); BPS (2010) accessed through www.bps.go.id

Figure 3. Map of Indonesia

MAP OF INDONESIA



Legenda

1 Nanggroe Aceh Darussalam	9 South Sumatera	18 West Nusa Tenggara	27 West Sulawesi
2 North Sumatera	10 Lampung	19 East Nusa Tenggara	28 South Sulawesi
3 West Sumatera	11 Banten	20 West Kalimantan	29 South East Sulawesi
4 Riau	12 West Java	21 Central Kalimantan	30 North Maluku
5 Riau Islands	13 DKI Jakarta	22 South Kalimantan	31 Maluku
6 Bangka Belitung Islands	14 Central Java	23 East Kalimantan	32 West Papua
7 Jambi	15 DI Yogyakarta	24 North Sulawesi	33 Papua
8 Bengkulu	16 East Java	25 Gorontalo	
	17 Bali	26 Central Sulawesi	

Scale 1 : 20.000.000

The Shifting Hierarchy of Indonesia Urban System

2.5 This section used the result of agglomeration-defined metropolitan areas to examine changes in the hierarchy of Indonesian metropolitan regions (WB, 2011). While the Indonesian Government continues to be concerned about Jakarta's primacy and the overall demographic and economic dominance of Java-Bali, two important trends seem to be emerging. First, urbanization is accelerating in the country's small and medium sized metropolitan areas. Second, some of the island regions off-Java-Bali are growing fast, particularly Sumatra and Sulawesi.

2.6 Table 7 provides a tabulation of metropolitan regions by size category (10 million inhabitants or more, 5-10 million, 1-5 million, 500,000 to 1 million, under 500,000 and small kota). These categories are based on 1996 population data. The most significant finding is that although Indonesian cities with a population greater than 10 million population grew very fast (7 percent compounded annual growth rate/CAGR) between 1996 and 2007, metropolitan areas with populations in the 5-10 million range grew even faster, with an average CAGR of 11.6 percent. The next fastest growing category was small kota with the population less than 100,000, which grew at 5.5 percent. Metropolitan areas with populations under 500,000 in population in 1996 grew fast as well, at a rate of 4.3 percent. The trends show that the Indonesian Government should be more concerned regarding urbanization in cities with a population in the 5-10 million range in the future, since this is where most of the urbanization will occur and also where economic performance is lagging.

Table 7. Relationship Between The Size of Urban Metropolitan Areas, Small Cities and Population Growth

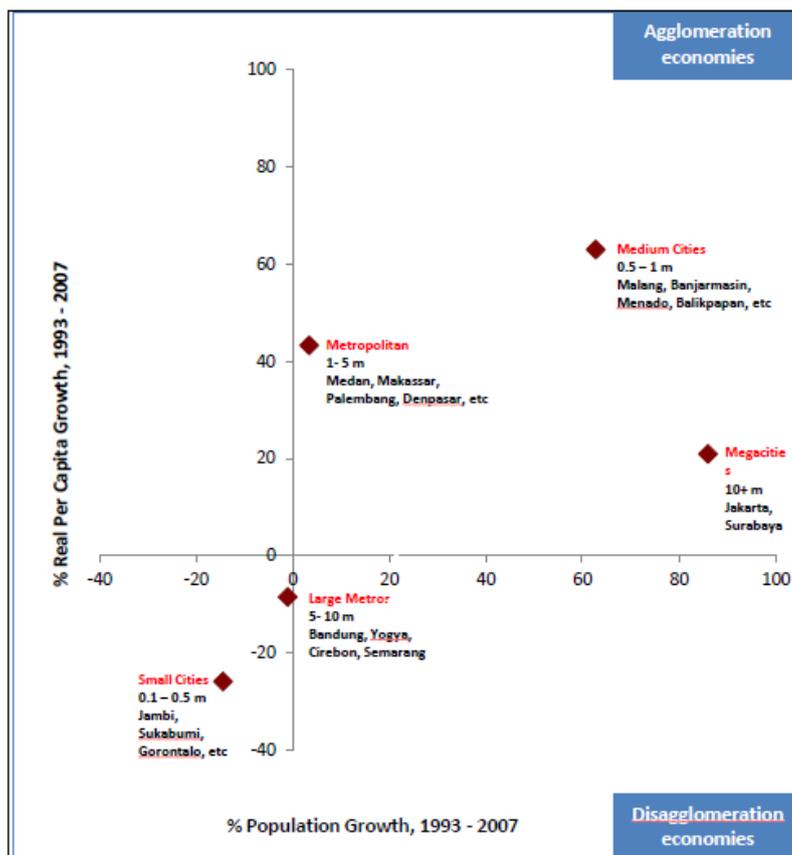
Metro size category	Population (in million)					Absolute change 1996-2007	CAGR 1996-2007 (%)	Share of change by size category (%)
	1996	1999	2002	2005	2007			
+10 million	17.77	24.08	23.92	36.16	37.25	19.47	7,0	18,4
5-10 million	7.56	27.66	28.78	24.94	25.31	17.74	11,6	16,7
1-5 million	37.45	28.91	30.65	26.65	27.01	-10.43	-2,9	-9,8
0.5 – 1 million	3.81	4.29	4.98	5.17	5.27	1.46	3,0	1,4
Under 0.5 million	4.84	6.91	6.87	7.28	7.69	2.84	4,3	2,7
Small Cities	1.93	2.16	3.13	3.36	3.49	1.55	5,5	1,5
Total Urban change	73.78	94.04	98.36	103.59	106.03	32.65	3,4	30,8
Rural areas	81.10	111.58	105.86	117.22	120.03	38.93	3,6	

Source: WB, 2011

2.7 In Indonesia, there are significant spatial disparities when it comes to the benefits of agglomeration (WB, 2011). Some of Indonesia's metropolitan areas have done well at generating agglomeration economies, while some have not done as well

as might have been expected. Most urban areas have experienced some form of agglomeration economy, although some have performed better than others. In general, cities with a population in the range of 1 million to 5 million have performed well, as have rural areas. In medium-sized cities with populations in the range of 500,000 to 1 million, economic growth has on average kept up with increases in population. This may be because medium-sized cities (as opposed to the larger and smaller metropolitan areas) have many infrastructure and other facilities necessary for a vibrant economy while, at the same time, they are not hampered by factors such as high land costs, congestion, and other issues affecting large metropolitan areas and that lead to diseconomies of scale. The megacities, Jakarta and Surabaya, have seen modest agglomeration economies. Cities with populations in the range of five to ten million have generally remained steady in terms of population size, but have experienced disagglomeration economies. This is probably caused by a decline in the manufacturing sectors in these cities. Small urban economies have not grown in proportion with their populations – perhaps an indication that the industry base is not sufficient to keep pace with the growth of population.

Figure 4. Size Categories by Classified by Agglomeration Type, 1993-2007



Source: WB, 2011

III. FOOD SYSTEMS

Rural Urban Linkages and Agropolitan Development

3.1 Within the next two decades, the majority of population in Indonesia will live in urban areas. Recent projection shown that the percentage of urban population will reach 66.6% in 2035. In this process of urbanization, cities grow and mega-cities emerge. However, it is important to remember that a majority of the urban population does not live in large cities, but in small and medium-sized cities including urban areas within district boundaries (district capital towns) and urban areas spilling over into one or more adjacent administrative areas. Central Bureau of Statistic data shown small and medium sized cities consist of 33% of total population in Indonesia or 80 million people. While the development of mega-cities attracts considerable attention, the small and medium-sized towns also need attention, because of the sizeable population that lives in such settlements (Kioe Sheng, 2005).

3.2 As widely argued in many scholarly literatures, small and medium cities play an important intermediary role in sustaining a more reciprocal urban-rural relation. However, many evidences show that the expected role has been lacking in many smaller urban centers. While there is tendency that the problem increases, the responses to the problems are also problematic. Most of small and medium cities in Indonesia do not have autonomous status which may find it difficult for local government to take appropriate measures to control urban growth while in the same time there is other big issue in resources capacity, especially in funding (Jawoto, 2011).

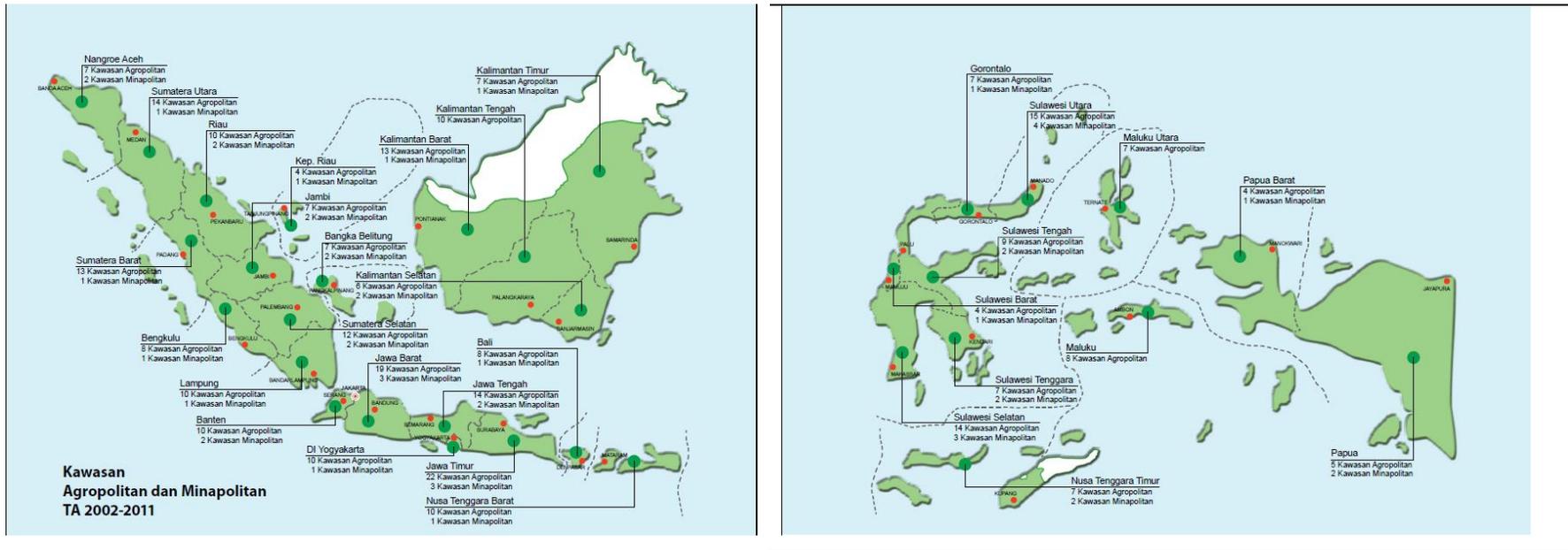
3.3 There has been a growing recognition that rural and urban areas have become increasingly interconnected through a constant movement of people, goods, capital, ideas and information. Urban and rural areas are becoming increasingly integrated as a result of better transport and communications, rural-urban and return migration, and the spread of urban economic activities in the rural areas (rural industrialization) and of rural economic activities in the urban areas (urban agriculture). The importance of rural urban linkages in regional network to support the sustainable economic growth has pointed out through the concept of Agropolitan Development (Douglas, 1981). This concept stated that rural development can be achieved if it is linked with urban development in the regional network. The function of urban area is more as non agricultural and government centres, while the sub-district is developed as the growth centre. The principal aim of agropolitan is promoting agricultural and rural development in order to enhance peasant prosperity. Through the agropolitan development, it is projected that rural employment problems will be overcome.

3.4 Indonesia experienced high economic growth during its first 25-year development plan - just prior to the economic crisis in 1997 - however during that time and until now, regional economic disparities have emerged. Growth and equality of interpersonal and interregional incomes are the critical issues in Indonesia's regional development. Since 1990's, the Government of Indonesia had implemented development programs to improve efficiency and interregional equity with mixed results such as PARUL/Poverty Alleviation through Rural Urban Linkages (1997-2003), Subdistrict/*Kecamatan* Development Program (KDP), the Development of Production

Centres (PKSP), Agropolitan Development, Minapolitan (marine and fishery centre), tourism development areas, transmigration area, etc. The Government of Indonesia realized there was a need for a balanced growth between urban and rural areas. The rural urban linkages approach to development in Indonesia emerged from the government's past experience in regional development, which indicated the important role of these types of linkages.

3.5 Since 2003, the Ministry of Agriculture supported by the Ministry of Public Works developed a rural development approach, which has been called the Agropolitan Development. Furthermore the concept expanded into marine and fishery development known as Minapolitan Development. This concept of Agropolitan basically aims at creating development centres in productive or potentially productive rural areas and agriculture-based small towns. The centres are to become the focal points for the collection, processing and distribution of agricultural inputs of the surrounding rural areas. The centres need to be supported by adequate infrastructures and other facilities. Therefore, Ministry of Public Works interventions need to be concentrated on these potential agriculture-based centres. The concept was adopted as the new rural development approach (rural-urban linkages) in response to the urbanization pressure on agricultural production. Within the period 2003-2011, it has been developed 382 agropolitan and minapolitan in rural-hinterland across 33 provinces in Indonesia.

Figure 5. Locations of Agropolitan and Minapolitan Development in Indonesia 2002-2011



Source: Ministry of Public Works, 2012 *Agropolitan dan Minapolitan: Konsep Kawasan Menuju Keharmonian*, Jakarta

Table 8. Infrastructure Support in 3 (three) Agropolitan Provinces 2002-2012

Province	West Sumatera	Central Java	East Java
District	9 Districts, 1 City Kab. Agam, Kab. Solok, Kab. Tanah Datar, Kab. Pesisir Selatan, Kab. Padang Pariaman, Kab. Lima Puluh Koto, Kab. Dharmasyara, Kab. Pasaman, Kab. Sijunjung, Kota Payakumbuh	14 Districts Kab. Semarang, Kab. Pemalang, Kab. Wonosobo, Kab. Batang, Kab. Magelang, Kab. Purbalingga, Kab. Karanganyar, Kab. Brebes, Kab. Boyolali, Kab. Banjarnegara, Kab. Banyumas, Kab. Cilacap, Kab. Purworejo, Kab. Pekalongan	18 Districts Kab. Ngawi, Kab. Banyuwangi, Kab. Mojokerto, Kab. Lumajang, Kab. Tulungagung, Kab. Bangkalan, Kab. Blitar, Kab. Pasuruan, Kab. Pacitan, Kab. Madiun, Kab. Pamekasan, Kab. Ponorogo, Kab. Trenggalek, Kab. Nganjuk, Kab. Malang, Kab. Lamongan, Kab. Tuban, Kab. Gresik
Agropolitan area	13 Agropolitan Areas Kws. Kecamatan IV Angkat Candung, Kws. Koto Gadang, Kws. Lembah Gumanti, Kws. X Koto, Kws. Sutera, Kws. VII Koto, Kws. Mungka, Kws. Sitiung, Kws. Mandeh, Kws. Rao, Kws. Palangki, Kws. Bukit P. Sembilan, Kws. Kamang Magek	14 Agropolitan Areas Kws. Sumowono, Kws. Belik, Kws. Rojonoto, Kws. Surbanwali, Kws. Merapi Merbabu, Kws. Larangan, Kws. Bunga Kondang, Kws. Sutomadansih, Kws. Goasebo, Kws. Beji, Kws. Jayabaya, Kws. Bagelen, Kws. Majenang, Kws. Talang Kerido	21 Agropolitan Areas Kws. Paron, Kws. Bangorejo, Kws. Muncar, Kws. Pacet, Kws. Senduro, Kws. Sendang, Kws. Soburbang, Kws. Kanigoro, Kws. Nglegok, Kws. Tutur, Kws. Nawangan Bandar Tamperan, Kws. Gedangsari, Kws. Pakong dan Waru, Kws. Ngebel, Kws. Bendungan, Kws. Sukomoro, Kws. Wajak, Kws. Poncokusumo, Kws. Ngimbang, Kws. Paseban, Kws. Sidayu
Total Fund	IDR 30.548.625.000 USD 2.7 Million	IDR 44.761.428.000 USD 4.06 Million	IDR 50.856.508.000 USD 4.6 Million

Box 2: Agropolitan Development in Indonesia: Key Features and Lesson Learned

Agropolitan development is a program implemented under Ministry of Agriculture and supported by Ministry of Public Works. This program is aimed: i) to improve the competencies (knowledge, skill, attitude and view) of farmers and local stakeholders in managing and developing agribusiness system, ii) to strengthen the coordination role of central government in facilitating agropolitan development. The specific performance indicators of the agropolitan program are: i) Establishment of Farmer's Groups (Gapoktan and Kelompok Tani), ii) Establishment of Training Centre for Self-Help Farmer Empowerment, iii) Training for Trainer for Agropolitan Manager, iv) Improved the competencies of farmers and local stakeholders and v) Establishment the management board of agropolitan area.

Some lessons can be learned from the implementation of agropolitan development program among others are:

- a. **Sustainability of the program.** After three years initial investment provided by Central Government, some local governments such as: East Java Province, Central Java Province, West Sumatera Province, Malang District, Agam District, Bogor District, Magelang District and Pematang District, have taken further initiatives in mainstreaming Agropolitan Development Program into their local budgeting and planning system. These initiatives ensured the program sustainability in the future time. The initial investment were used to finance the start up activities to reach specific targets.
- b. **Multi-stakeholder's approach.** This agropolitan development program was designed to involve key local stakeholder's in agribusiness including local government, business sector, farmer's, farmer's group, etc in all stages of program implementation starting from planning, implementation, monitoring and evaluation. However, the institutional set-up in managing agropolitan regions still dominated by local government officers.
- c. **Region's competitiveness.** The approach of agropolitan development was to improve region's competitiveness through the efficiency in developing main agriculture commodity. The provision of infrastructure for agri-business such as: agribusiness logistic hub, road networks, bridge construction, etc became the main support under the Ministry of Public Works to support production and marketing of agriculture products.
- d. **Market access and diversification.** The development of market access and diversification are still limited due to the lack of market information system.
- e. **Value added of agriculture products.** The agriculture commodities in agropolitan area are mainly processed in form of raw products. Manufacturing industries on agriculture products are not yet developed to increase the value added.
- f. **Rural-urban imbalanced growth.** Initially, this agropolitan development program was designed to reduce rural – urban imbalanced development. In fact, this program is limited to the development of agriculture production centres, but not yet addressed rural-urban inequalities.
- g. **Strengthening local institutions.** The availability of strong local institutions and the integration to spatial plan are the requirements for the program

sustainability.

- h. **Creative communities and human resource quality.** This program supported the establishment of creative community groups and enhanced the capacities of local stakeholder's to develop agropolitan region.

Source: Translated from the draft academic paper for Local Economic Development Strategy 2015-2019, prepared by Directorate of Urban and Rural, National Development Planning Board (Bappenas), 2013

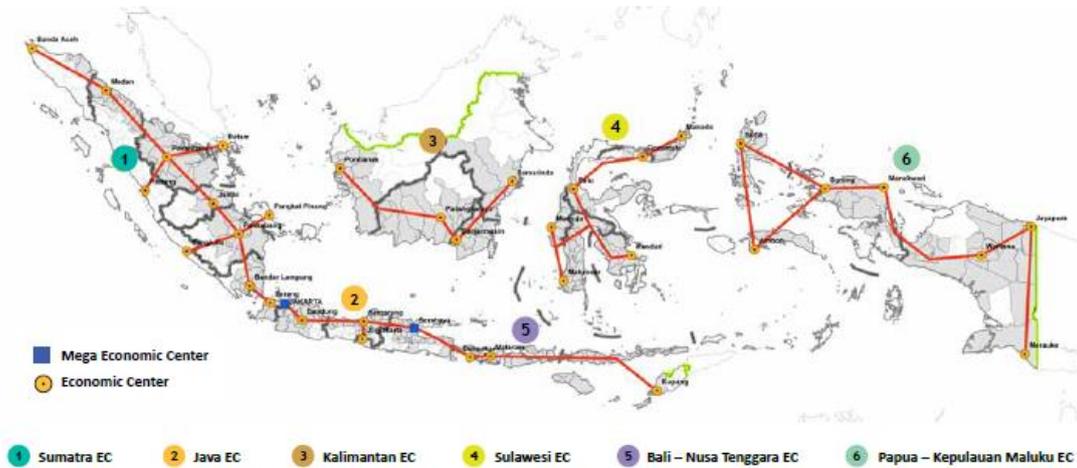
Master Plan for the Acceleration and Expansion of Indonesia's Economic Development (MP3EI)

3.6 The Government of Indonesia announced the Master Plan for the Acceleration and Expansion of Indonesia's Economic Development (MP3EI) in May 2011. This has been followed by almost constant debate surrounding the feasibility and the implementation challenges likely to be faced by the MP3EI (Strategic Asia, 2012). The MP3EI is a very ambitious plan. It aims to propel Indonesia into the top ten economies and raise per capita from US\$3000 to US\$15,000 by 2025. The policy rests on three main pillars: establishing six economic corridors based on the comparative advantage of the different regions of Indonesia; promoting connectivity within Indonesia and the ASEAN region, as well as improving human resources and science and technology.

3.7 Under Presidential Regulation No. 32/2011, President Yudhoyono launched the MP3EI policy in May 2011 and the policy was supported by sectoral ministries, local governments and state- owned enterprises. The MP3EI has huge potential to develop economic growth through the promotion of six economic corridors:

1. Sumatra Economic Corridor as a "Centre for Production and Processing of Natural Resources and As Nation's Energy Reserves";
2. Java Economic Corridor as a "Driver for National Industry and Service Provision";
3. Kalimantan Economic Corridor as a "Centre for Production and Processing of National Mining and Energy Reserves";
4. Sulawesi Economic Corridor as a "Centre for Production and Processing of National Agricultural, Plantation, Fishery, Oil & Gas, and Mining";
5. Bali – Nusa Tenggara Economic Corridor as a "Gateway for Tourism and National Food Support";
6. Papua – Kepulauan Maluku Economic Corridor as a "Centre for Development of Food, Fisheries, Energy, and National Mining.

Figure 6. Economic Corridors Map



3.8 The Master Plan identifies eight primary programs and 22 primary activities as the focus of national development. The eight primary programs are: agriculture, mining, energy, industrial, marine, tourism, telecommunications and the development of strategic areas. The strategic initiative of the Master Plan is to encourage large-scale investment in 22 primary activities: shipping, textiles, food and beverages, steel, defence equipment, palm oil, rubber, cocoa, animal husbandry, timber, oil and gas, nickel, copper, bauxite, fisheries, tourism, food and agriculture, the Jabodetabek area, the Sunda Straits strategic area, transportation equipment, and information and communication technology.

Figure 7. Main Economic Activities for Each Corridors

Main Economic Activity	Sumatra	Java	Kalimantan	Sulawesi	Bali – Nusa Tenggara	Papua – Kep. Maluku
Steel	✓		✓			
Food and Beverages		✓				
Textile		✓				
Transportation Equipment		✓				
Shipping	✓	✓				
Nickel				✓		✓
Copper						✓
Bauxite			✓			

Main Economic Activity	Sumatra	Java	Kalimantan	Sulawesi	Bali – Nusa Tenggara	Papua – Kep. Maluku
Palm Oil	✓		✓			
Rubber	✓					
Food Agriculture				✓		✓
Tourism					✓	
ICT		✓				
Coal	✓		✓			
Oil and Gas			✓	✓		✓
Jabodetabek Area		✓				
Sunda Straits National Strategic Area	✓					
Defence Equipment		✓				
Animal Husbandry					✓	
Timber			✓			
Cocoa				✓		
Fishery				✓	✓	✓

Overview of Sulawesi Economic Corridor as The Centre for Production and Processing of National Agricultural

3.9 This corridor is expected to be at the forefront of the national economy serving the markets of East Asia, Australia, Oceania and America. Sulawesi Economic Corridor has a high potential to achieve economic and social development with its main economic activities. In order to accomplish this, several issues must be considered:

- The low value of Sulawesi’s Gross Regional Domestic Product (GRDP) per capita when compared to other islands in Indonesia;
- The slow growth of agriculture as the main economic activity even though agriculture is the largest contributor to Sulawesi’s GRDP (30 percent) and absorbs about 50 percent of the total workforce;
- Investments in Sulawesi are from domestic and foreign investors, but relatively low compared to other regions;
- Lack of adequate economic and social infrastructure such as roads, electricity, water, and health.

Sulawesi Economic Corridor development focuses on the main economic activities of food agriculture, cocoa, fishery and nickel mining. In addition, the main economic activities of oil and gas can also be developed with the potential to drive economic growth in this corridor.

3.10 Food Agriculture activities in Sulawesi are rice, corn, soybean, and cassava. Food agriculture activities, especially rice and corn, are very important, particularly for domestic consumption. Indonesia is the third largest rice producer in the world, most of which is used for domestic consumption. Indonesia imported 800,000 tons of corn in 2010 to meet its domestic demand of 5 million tons. Sulawesi is the third largest food producer in Indonesia, which accounts for 10 percent of national rice production and 15 percent of national corn production. Food Agriculture contributes 13 percent of Sulawesi’s GRDP. Considering the limited available land to expand agricultural area, food intensification is one of the most possible ways to increase food production. Rice productivity in Sulawesi is still lower compared to other regions in Indonesia.

3.11 In order to face the identified challenges, the following regulatory and policy support are necessary:

- Expanding planting area by optimizing the utilization of land, the creation of new paddy fields, rehabilitation and conservation of agricultural land;
- Securing the availability and sustainability of food production through the d of food reserves and storage, empowerment and institutional capacity building of farmers (Farmer's Group or GAPOKTAN, Cooperatives);
- Reducing the potential loss of quantity and value of post-harvest through improved quality storage and development of effective purchasing mechanisms; Improving financing access for farmers;
- Strengthening institutions to support farmer's empowerment and improve their coordination function.

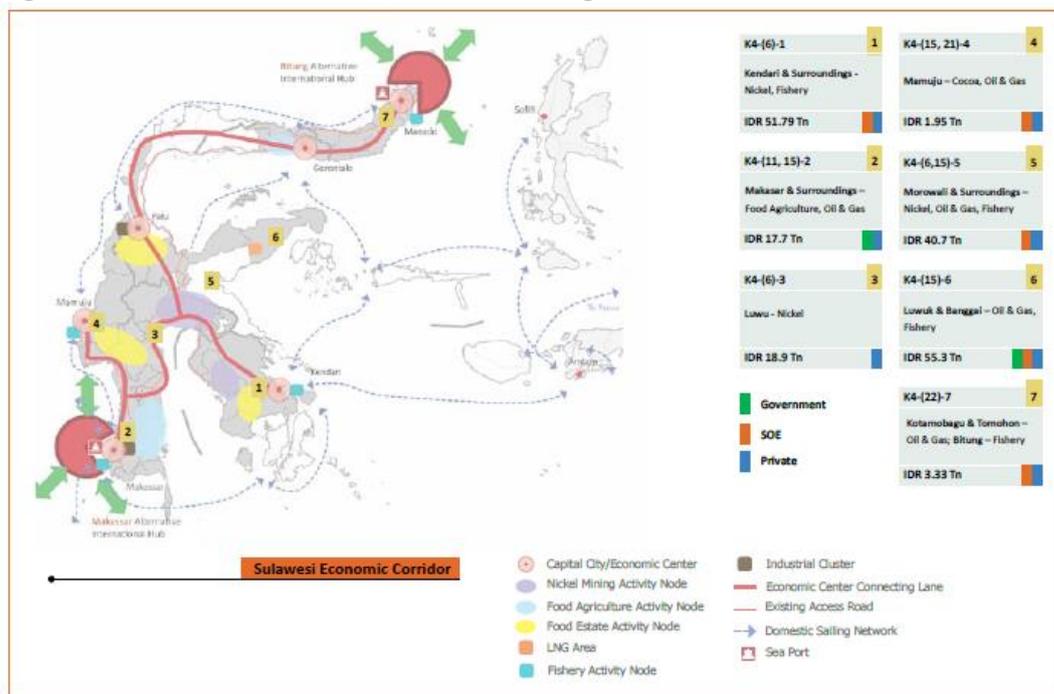
3.12 Development of food agriculture depends on increased connectivity (infrastructure) in the form of:

- Improve access roads to reduce dependence on commercial intermediaries;
- Improve irrigation facilities, where production capacity is vulnerable to climate change if it continues to rely on simple irrigation dependent on rain;
- Revitalize and improve the capacity of existing warehouse and storage (currently BULOG buys 5 percent of national rice production, but the storage facilities are old and in need of repair) to increase the life of food in storage, and to reduce losses caused by bad storage (number of BULOG warehouses in Sulawesi is the second highest in Indonesia);
- Improve access roads between farms and trading centers, to help farmers facilitate sales and reduce reliance on intermediaries who raise prices up to 30 percent of final price (expected to increase the welfare of farmers);
- Develop/improve farm irrigation networks (*Jaringan Irigasi Teknis Usaha Tani/JITUT*), village irrigation networks (*Jaringan Irigasi Desa/JIDES*), and micro water management (*Tata Air Mikro/TAM*), as well as construct/repair pumps, wells, water ponds, etc.

3.13 In order to make food agriculture more effective and efficient, it is necessary to:

- Increase productivity through the use of appropriate technologies (irrigation systems and tractors), balanced fertilizer use with accuracy-based principles, high quality/certified seeds, and increasing farmers' knowledge;
- Management of treatment for pests (*Organisme Pengganggu Tanaman/OPT*) and controlling pesticide residues;
- Increasing levels of agriculture education for farmers.

Figure 8. Sulawesi Economic Corridor Strategic Initiatives



IV. LABOR MARKETS

4.1 Urbanization is not only interpreted as demographic transition of rural people to urban area, but also urban transition from a predominantly agricultural population living mostly in relatively small and dispersed rural settlements towards a predominantly urban-based population⁵ engaged mostly in industrial and service activities (McGranahan, 2014). This led to a structural change in the pattern of population movement from agricultural employment in rural areas to non-agricultural employment in urban areas. Urbanization in Indonesia is triggered by economic developments, notably in industry and services sectors, which tend to locate in large cities due to the availability of utilities such as water supply, electricity, seaports and airports, concentration of skilled labor and markets⁶.

4.2 Indonesia economy has recorded strong growth in the recent years. However, economic growth is not accompanied by a decrease in development disparities among regions, provinces, cities/districts, rural and urban. Economic activities highly concentrated in the Western Region of Indonesia. The pattern of urbanisation has been uneven, with city growth and urban areas highly concentrated in Java, Bali, Sumatra and South Sulawesi. Rapid and uncontrolled urbanization has been creating large growing demand for urban infrastructure and services. Development of urban infrastructure and services has not been matching the rapid pace of growing demand,

⁵ Editor note: see para 3.1 – 33% of population that continues to resides in rural areas but is engaged in non-agricultural activities – rural-urban labour mobility

⁶ Editor note: see para 1.2 – industrial investment in rural areas

resulting in shortage in every sector. The large cities development does not much strengthen linkages with smaller cities, as reflected in the disparity of economic development between rapidly growing large cities and stagnant small towns, notably in Java (Firman, 2007).

4.3 In recent years the pace of job creation has increased as a result of a pro-jobs strategy implemented by the government. In the period of 2005-2013 unemployment fell as the labor force increased by an average 1.5 million persons per year. Unemployment rate decrease from 11.87 million in 2005 to 7.44 million in 2013. The share of agriculture employment steadily decreased from 44% in 2005 to 35% in 2013, while the share of non agriculture employment such as industry and service continuously increased. This condition shown than rural to urban migration has reduced the number of rural people working in agriculture sector and the growth of non agriculture industries in small and medium cities. Female labor force also increased from 29 million in 1990 to 45 million in 2013 that shown the participation of women in development has improved in the last two decades . In the last two decades, it can be seen that the growth of the working age population has been greater than the growth of the workforce. The percentage of working-age population increased due to the changing in age-structure of Indonesian population, resulting the decreasing of dependency ratio.⁷

Table 9: Key Economic Sector Indicators

Sector Indicator	1990	1995	2000	2005	2010	2011	2012	2013
Population (million)	184	199	213	227	241	244	247	250
Population growth rate (%)	1.7	1.5	1.3	1.2	1.3	1.3	1.2	1.2
Urban population (% of total)	31	36	42	46	50	51	51	52
Dependency ratio (% of working-age population)	67	61	55	54	53	53	52	52
Labor force, total (million)	75	84	96	106	117	117	120	120
a. Male	46	54	60	68	72	73	75	75
b. Female	29	31	38	38	45	44	46	45
Agriculture share of employment (%)	55	43	45	44	38	36	35	35
Industry share of employment (%)	14	19	17	19	19	21	22	20
Service share of employment (%)	31	38	37	37	42	43	43	45
Unemployment total (% of labor force)	2.5	7.0	8.1	11.2	7.1	7.4	6.1	6.2

Source: *Indonesia Economic Quarterly, WB, July 2014*

Notes: *This statistical data used the formal (or registered) employment. Informal employment is not included*

⁷ Authors note: There is no available data on spatial distribution of jobs. This could be analysed directly from the Labor Force Survey and/or National Socio Economic Data.

Informal Employment

4.4 Compare to other Asian countries, Indonesia has relatively high proportion of person working in informal employment (72.5%) and informal sector (60.2%). Employment in the informal sector and informal employment refer to different aspects of informality. Employment in the informal sector is an enterprise-based concept and covers persons working in units that have “informal” characteristics in relation to, e.g., the legal status, registration, size, the registration of the employees, their bookkeeping practices, etc. Informal employment is a job-based concept and encompasses those persons whose main jobs lack basic social or legal protections or employment benefits and may be found in the formal sector, informal sector or households. Almost all persons employed in the informal sector are in informal employment. However, not all those in informal employment belong to the informal sector: there may be persons working outside of the informal sector (i.e., either in the formal sector or in households producing for own final use) that have informal employment (ILO, 2012)⁸.

Table 10: Employment in the informal economy in non-agricultural activities: comparison among Asian Countries

Country (year)	Person in informal employment		Persons employed in informal sector		Persons in informal employment outside the informal sector	
	thousands	% of non agricultural employment	thousands	% of non agricultural employment	thousands	% of non agricultural employment
India (2009/2010)	185,879	83,6	150,113	67,5	37,409	16,8
Indonesia (2009)	3,157	72,5	2,621	60,2	532	12,2
Philippines (2008)	15,150	70,1	15,680	72,5	2,490	11,5
Thailand (2010)	9,642	42,3	n.a	n.a	n.a	n.a
Vietnam (2009)	17,172	68,2	10,948	43,5	6,30325,0	

Source: ILO – Dept of Statistic, June 2012

Youth Employment

4.5 Indonesia is now facing young-age population. Youth-population number in urban areas in 2010 is about 33.3 million people higher than in rural areas which is only 28.9 million people (Youth Statistic, 2010). It is estimated that the proportion of youth population will reach 68.7% of total population in 2025. This condition known as population divide or demographic bonus that become productive resources for future development if properly managed. Statistic data in 2010 showh that about 67% of urban youth worked as labor in industrial and service sectors which highly vulnerable

⁸ Authors note: There is no available data on spatial distribution of informality and no sectoral categories.

due to its dependency to business owners. The future challenges are to improve the skills and their competencies in order to compete in global job-markets.

Table 11. Youth worker based on employment status and living area in 2010

Employment status	Urban		Rural		Total	
	Number	%	Number	%	Number	%
Self-entrepreneurship	2.401.338	14,75	2.816.860	7,64	5.218.198	16,18
Self employed assisted by non fixed income labor	264.451	1,62	1.556.247	9,75	1.820.698	5,65
Self employed assisted by fixed income labor	463.726	2,85	370.263	2,32	833.989	2,59
Labor/staff	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 worker/not paid	738.081	4,53	4.914.040	30,78	5.652.121	17,53
Number	16.284.591	100,00	15.966.675	100,00	32.251.266	100,00

Source; Youth Statistic, 2010

V. WITHIN-COUNTRY MIGRATION

5.1 Indonesia's high population growth in the last three decades has led to an ever-greater need for employment and social services. Uneven economic development, however, means that not every region in the country has the same capacity to meet citizen needs. This situation has led both to internal population movements between regions and to international migration. As with other developing countries, the pattern of migration within Indonesia is one of polarized migration flows to certain areas, especially to large metropolitan cities.

5.2 Table 10 provides "recent migration" patterns in Indonesia in 1990, 2000 and 2010. Recent migrants are citizens whose current residence at the time of survey differs from their place of residence five years previously. The 2000's data show that some provinces in Java island such as DKI Jakarta, Banten and DI Yogyakarta had a negative net migrant population, indicating fewer in-migrants than out-migrants. This negative trend may be explained by such factors as varying community migration habits, relative location advantages, and varied costs of living. The high cost of living in Metropolitan Jakarta likely pushed people to live in surrounding areas. The negative net migration in Central Java, on the other hand, is probably related to urban-rural migration from this province, which Jakarta and West Java becoming the main corresponding migration destinations. Given the high cost of living in Jakarta⁹, these

⁹ Authors note: Jakarta Metropolitan Region (JMR or known as Jabodetabekjur area) covered 8 districts/cities in 2 (two) provinces which are West Java Province (Depok City, Bekasi City, Bogor City, Bekasi District, Bogor District, Cianjur District) and Banten Province (Tangerang City and Tangerang District)

migrants tend to settle in surrounding districts/cities in West Java Province. These factors explain the high volume of positive net migration in West Java. East Java province has experienced negative net migration in 1990 and 2000 censuses, but has positive net migration in 2010. This condition shown that East Jave slowly moved as destination for migrants from other Indonesian regions.

5.3 Some provinces outside Java island have the negative net migration such as: North Sumatera, West Sumatera, Bangka Belitung, East Nusa Tenggara, Central Sulawesi, Gorontalo and Maluku but the factors are varied among provinces. Cultural factors likely influenced peole from North Sumatera, West Sumatera, Jambi and Bangka Belitung to move to other places, moslty to Jakarta. They have a strong network among families in corresponding destination. Whole for East Nusa Tenggara, Central Sulawesi and Maluku, social conflicts are the most contributing factors to negative net migration. Those provinces suffered from ethnical conflicts in the last ten years.

Table 12. Inter-Provincial Recent Migration (5-years interval)

No.	Province	In Migration			Out Migration			Net Migration		
		1990	2000	2010	1990	2000	2010	1990	2000	2010
1	Nanggroe Aceh Darussalam	56.326	15.369	63.987	49.389	161.581	38.802	6.937	(146.212)	25.185
2	Sumatera Utara	107.882	139.887	123.962	277.647	358.521	372.644	(169.765)	(218.634)	(248.682)
3	Sumatera Barat	129.049	109.016	130.180	173.220	233.945	150.709	(44.171)	(124.929)	(20.529)
4	Riau	245.465	358.815	294.957	92.903	88.708	125.814	152.562	270.107	169.143
5	Kepulauan Riau	*)	206.664	210.056	*)	41.340	52.689	*)	165.324	157.367
6	Jambi	136.397	109.534	110.114	64.033	83.346	129.814	72.364	26.188	(19.700)
7	Sumatera Selatan	212.196	163.250	117.396	198.841	151.956	26.910	13.355	11.294	90.486
8	Bangka Belitung	*)	36.536	60.808	*)	33.773	154.420	*)	2.763	(93.612)
9	Bengkulu	82.831	68.832	47.827	28.595	35.831	17.054	54.236	33.001	30.773
10	Lampung	212.298	149.013	92.439	135.907	149.258	54.847	76.391	(245)	37.592
11	DKI Jakarta	833.029	702.202	643.959	993.377	850.343	883.423	(160.348)	(148.141)	(239.464)
12	Jawa Barat	1.350.596	1.097.021	1.048.964	495.727	631.753	595.877	854.869	465.268	453.087
13	Banten	*)	620.299	465.080	*)	207.358	979.860	*)	412.941	(514.780)
14	Jawa Tengah	384.753	354.204	301.417	1.159.694	1.017.494	103.492	(774.941)	(663.290)	197.925
15	DI Yogyakarta	161.740	196.586	227.364	120.777	129.530	528.370	40.963	67.056	(301.006)
16	Jawa Timur	328.607	185.966	243.061	647.348	529.037	192.983	(318.741)	(343.071)	50.078
17	B a l i	65.967	87.225	102.425	56.127	47.353	41.216	9.840	39.872	61.209

18	Nusa Tenggara Barat	37.401	59.964	47.648	36.853	50.714	40.982	548	9.250	6.666
19	Nusa Tenggara Timur	27.107	69.910	49.339	45.620	54.989	67.484	(18.513)	14.921	(18.145)
20	Kalimantan Barat	43.809	49.202	42.650	44.686	45.682	42.144	(877)	3.520	506
21	Kalimantan Tengah	78.791	124.387	122.969	37.015	24.903	34.506	41.776	99.484	88.463
22	Kalimantan Selatan	98.330	89.320	103.455	76.447	62.612	55.292	21.883	26.708	48.163
23	Kalimantan Timur	194.531	155.498	213.558	68.192	42.817	73.039	126.339	112.681	140.519
24	Sulawesi Utara	34.736	54.504	48.042	51.272	38.830	45.473	(16.536)	15.674	2.569
25	Gorontalo	*)	9.257	26.695	*)	33.448	39.174	*)	(24.191)	(12.479)
26	Sulawesi Tengah	70.034	75.328	61.961	28.038	30.555	208.570	41.996	44.773	(146.609)
27	Sulawesi Selatan	119.455	80.648	120.638	161.050	185.215	42.613	(41.595)	(104.567)	78.025
28	Sulawesi Barat	*)	33.739	37.206	*)	19.078	16820	*)	14.661	20.386
29	Sulawesi Tenggara	71.143	110.289	64.097	36.681	22.251	20.053	34.462	88.038	44.044
30	Maluku	68.701	18.657	29.236	38.899	92.781	30.179	29.802	(74.124)	(943)
31	Maluku Utara	*)	14.764	24.462	*)	28.480	14.887	*)	(13.716)	9.575
32	Papua	73.776	49.736	66.562	31.631	24.329	38.803	42.145	25.407	27.759
33	Papua Barat	*)	25.890	53.905	*)	17.623	16835	*)	8.267	37.070

Source: Central Statistical Bureau, 2010

VI. KEY POLICIES AND PROGRAMS

6.1 The Government of Indonesia (GOI) has put the concept of rural-urban linkages as main development strategy to reduce imbalanced regional development. Since the 1980s, the concept of RUL has been part of the National Urban Development Strategy (NUDS) and implemented through various development programs. Currently, the GOI prepare the Medium Term Development Plan (RPJMN) for the next five years (2015-2019). Rural-urban linkage is a key strategy in regional development. Policy direction on rural urban linkages focuses on the implementing the National Urban Hierarchy and System that can play as intermediary role in linking rural production centre to urban market (Preliminary Draft of RPJMN 2015-2019, Bappenas, 2014). This policy will be translated into these following strategies: i) Improve the connectivity between Small and Medium Cities to rural areas, ii) Implement development program to improve rural urban linkages such as: agropolitan and minapolitan development, tourism area development and transmigration (inter-island migration), iii) Build the capacity of governance, institutional and communities in implementing rural urban linkages. These policies and strategies became guidances for respective Ministries/Institutions dealing with rural urban linkages in Indonesia.

6.2 There are some programs related to rural urban linkages that have been implemented by various ministries/institutions among others are: i) District Potential Product (Prukab), ii) Agropolitan, iii) Minapolitan, iv) One Village One Product (OVOP), v) Integrated Transmigration Area (KTM), vi) One Stop Service (PTSP), and vii) Forum for local economic development (FEDEP). Table 10 summaries rural urban linkages related programs in Indonesia.

Table 13. Rural Urban Linkages related programs

No	Program	Institution	Scope
1	District Potential Product (PRUKAB)	Ministry of Least Developed Region (PDT)	Improve the regional capacity and the development of potential commodity
2	Agropolitan Development	Ministry of Public Works and Ministry of Agriculture	Improve institutions and human resources on agropolitan centres Provide basic infrastructures to support agropolitan centres
3	Minapolitan Development	Ministry of Marine and Fishery	Improve the capacity of small and medium enterprises on fishery Develop region-base marine and fishery economic system
4	One Village One Product (OVOP)	Ministry of Small and Medium Enterprises and Cooperative	Increase market access through developing partnership with private sector and other economic actors
5	Integrated Transmigration Area (KTM)	Ministry of Transmigration	Develop new growth centre in transmigration area

6	One Stop Service (PTSP)	Investment Board (BKPM)	Develop one stop service system for business permit and other development permits
7	Local Economic Development Forum (FEDEP)	Bappenas supported by GIZ RED	Provide policy advice for local government in local economic development Develop a forum that can facilitate and accelerate local economic development

VII. REFERENCES

Definitions

CBS (Central Board of Statistics), 2010 Klasifikasi 2005 Urban-Rural Berdasarkan PODES, Jakarta.

CBS (Central Board of Statistics), 2011 Potensi Desa 2005 dan 2011, Jakarta.

Cohen, B. 2006 Urbanization in developing countries: Current trends, future projections, and key challenges for sustainability, Technology in Society 28 (2006) 63–80.

Firman, T. 2007 The Patterns of Indonesia's Urbanization, 1980-2007, unpublished paper, Bandung.

Law No. 32/2004 on Local Governance

Law No. 26/2007 on Spatial Planning

Law No. 24/2014 on Village

McGranahan, G. and D. Satterthwaite, 2014 Urbanisation concepts and trends. IIED Working Paper. IIED, London.

Ministry of Public Works, 2014 Draft National Report on Habitat 2014, Urban Demography

Kioe Sheng, Y., 2005 Rural Urban Linkages – Policy Implication, Poverty Reduction Section, ESCAP, Bangkok.

Tacoli, Cecilia. 1998 Rural-urban interactions: a guide to the literature, Environment and Urbanization, vol.10, No. 12, April 1998, pp. 147-166.

The World Bank, 2011 The Rise of Metropolitan Regions: Toward Inclusive and Sustainable Regional Development, Jakarta.

Uchida, H. and A. Nelson. 2010 Agglomeration Index: Towards a New Measure of Urban Concentration. pp 41–59 in *Urbanization and development: multidisciplinary perspectives*, eds J. Beall, B. Guha- Khasnobis, and S.M.R. Kanbur. Oxford: Oxford University Press

Demographics

BPS, Bappenas, UNFPA, 2014 Proyeksi Penduduk Indonesia 2010-2035

BPS, 2010 Population Census 2010

The World Bank, 2011 The Rise of Metropolitan Regions: Toward Inclusive and Sustainable Regional Development, Jakarta.

Food Systems

Coordinating Ministry for Economic Affairs, 2011 Masterplan Acceleration and Expansion of Indonesia Economic Development 2011-2025

Douglas, Mike. 1981 Agropolitan Development: An Alternative for Regional Development in Asia, *The Himalayan Review*, Nepal Geographic Societ

ESCAP, 2005 Rural-urban linkages for poverty reduction: A review of selected approaches from Asia and the Pacific, Bangkok

Kioe Sheng, Y. 2005 Rural Urban Linkages – Policy Implication, Poverty Reduction Section, ESCAP, Bangkok.

Setyono, Jawoto S. 2011 Small and Medium Urban Centres in Central Java, Indonesia: Questioning The Role of Planning and Governance in the Development Process, International Conferene on the Future of Urban and Peri-Urban Area, Yogyakarta, Indonesia

Ministry of Public Works, 2012 Agropolitan dan Minapolitan: Konsep Kawasan Menuju Keharmonian, Jakarta

National Development Planning Board (Bappenas), 2013 The Draft Academic Paper for Local Economic Development Strategy 2015-2019

Labour

CBS (Central Board of Statistics), 2010 Statistik Kepemudaan 2010, Jakarta.

Firman, T. 2007 The Patterns of Indonesia's Urbanization, 1980-2007, unpublished paper, Bandung.

ILO, 2012 Statistical update on employment in the informal economy, ILO - Department of Statistics

McGranahan, G. and D. Satterthwaite. 2014 Urbanisation concepts and trends. IIED Working Paper. IIED, London.

The World Bank, 2014 Indonesia Economic Quartely Report July 2014, Jakarta.