

Urbanization issues in two large Asian countries: Indonesia and Bangladesh

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**Seminar at PIDE, Islamabad
31 August 2016**

Outline

- Issues in measuring urbanization
- Trends in urbanization in Indonesia and Bangladesh
- Differences in people's lives in rural and urban areas
- Growth of mega-urban areas
- Jakarta and Dhaka: among the world's largest megacities
- Some conclusions and policy recommendations.

What is urbanization?

- Urbanization means an increase in the proportion of population living in urban areas.
- **Urban growth is different from urbanization.** If population growth in a country is 2 per cent per annum, and the growth of urban population is also 2 per cent per annum, urbanization is not taking place, although the urban population is increasing quite rapidly.
- If, on the other hand, urban population is increasing by 4 per cent per annum in a country where population growth is 2 per cent per annum, then urbanization - an increase in the urban share of the total population - is clearly taking place.

Urban-rural distinctions



Java, Indonesia



Peri-urban area - Jakarta



Bangkok, Thailand

What is an urban area?

- Increasingly difficult to distinguish urban from rural areas
- Many localities (especially on the fringes of large cities) have very mixed characteristics
- Even “truly” rural areas are now linked to urban areas through communications (television, mobile phones, better transportation) in ways that were inconceivable four or five decades ago
- So when we say Indonesia is 50% urban, or Bangladesh 28% urban, we need to be aware of the uncertainty of this figure

Role of migration in urbanization

- **3 possible factors increasing urban populations**

- Natural increase
- Net in-migration
- Re-classification from rural to urban area

The first and third of these are often neglected; **but net in-migration does play a large role**

Migration data

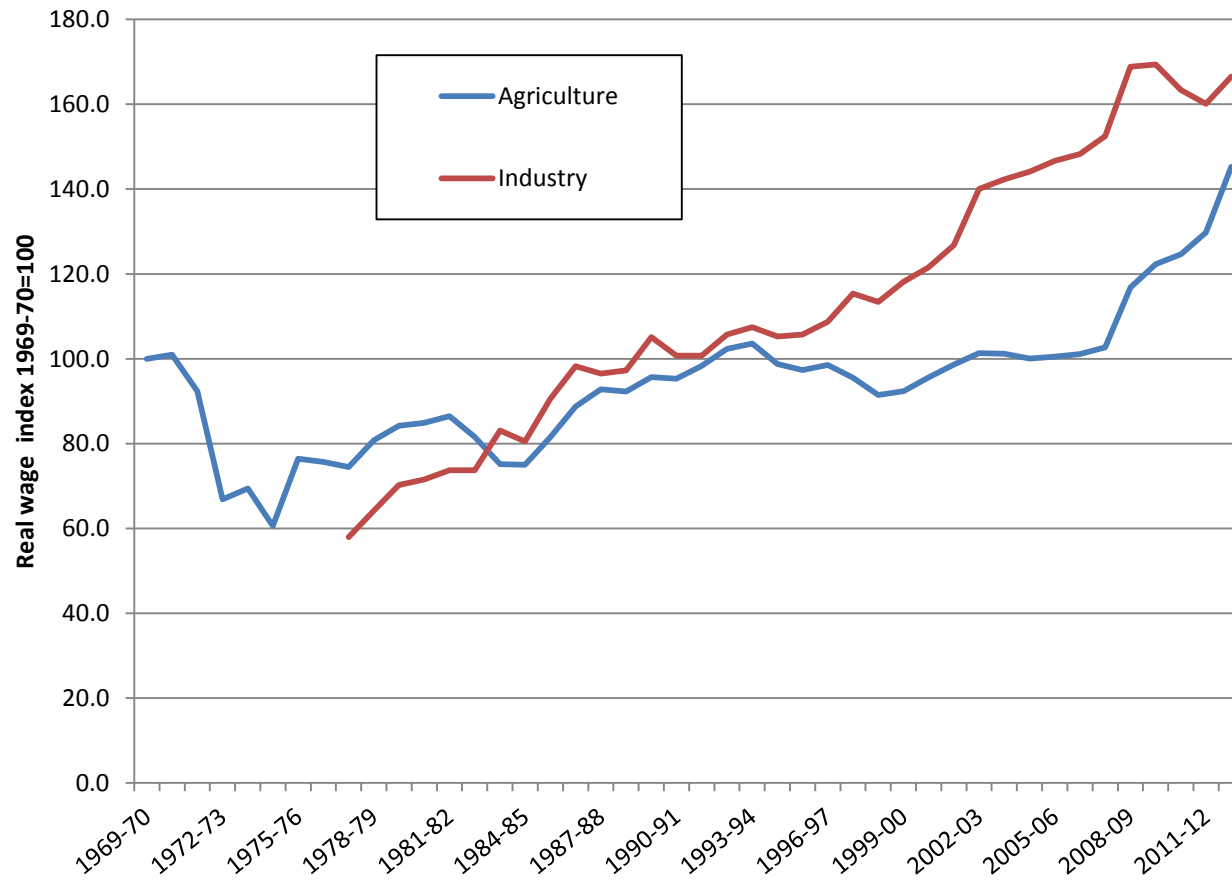
- Crucial role of Population Census in providing migration data
- Small area data crucial
- Problems in Bangladesh migration data (2011)
- The feminization of rural-urban migration in Bangladesh

WHY RURAL-URBAN MIGRATION?

- Big differences in output per worker by sector; provided jobs are available, the economy benefits from urban-ward migration

	Bangladesh	Indonesia
Agriculture	1.00	1.00
Manufacturing	4.09	7.17
Services	3.41	2.39

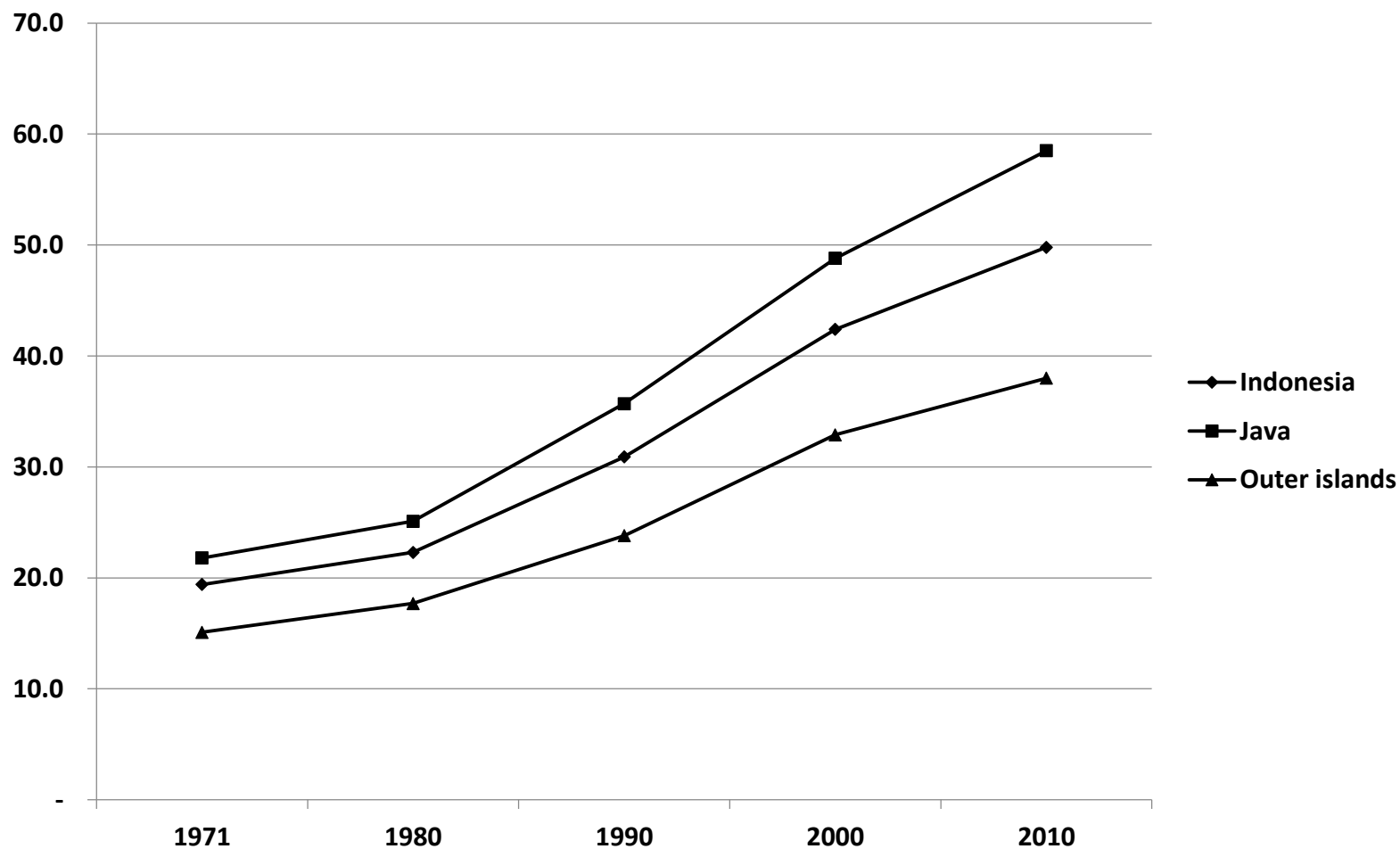
Bangladesh – trends in real wages 1970-2010



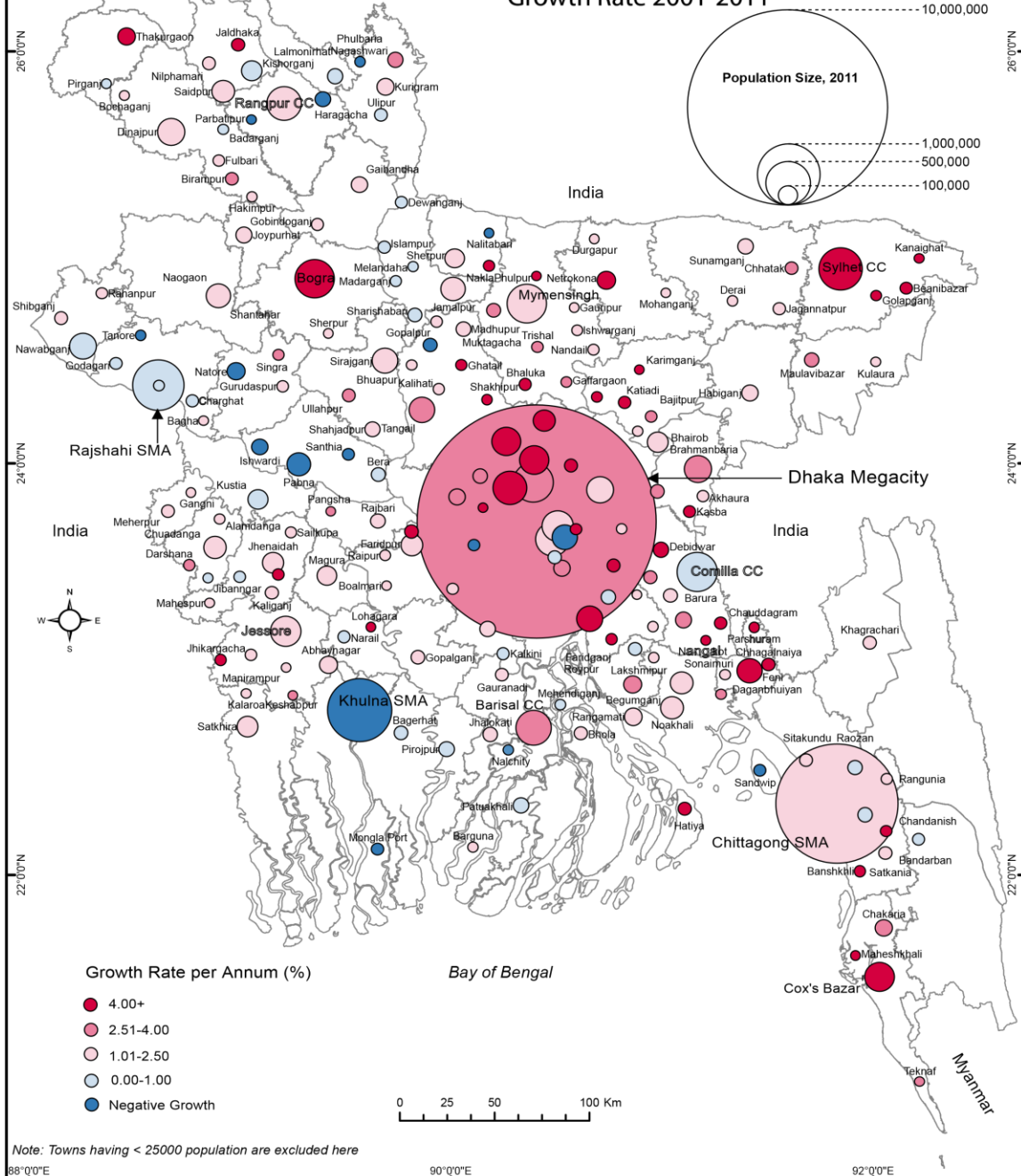
Indonesia: Distribution of the employed population across broad industry sectors 1971-2010

Sector	1971	1980	1990	1995	2010
Agriculture	65.9	56.2	52.7	44.0	38.4
Industry	10.1	13.3	15.1	18.4	19.3
Services	24.1	30.5	32.2	37.6	42.3
Total	100	100	100	100	100

Indonesia: Trends in percentage of population living in urban areas, 1971-2010



Bangladesh
Urban Population Size 2011 and Exponential
Growth Rate 2001-2011



Net Migration Rate of Recent Internal Migrants by Districts, 2011

Legend
Net Migration Rate Range (Per 1000 Population)

- 83.77 - -42.92
- 42.91 - -22.43
- 22.42 - -6.49
- 6.48 - 20.95
- 20.96 - 181.98

0 25 50 100 150 200 Kilometers

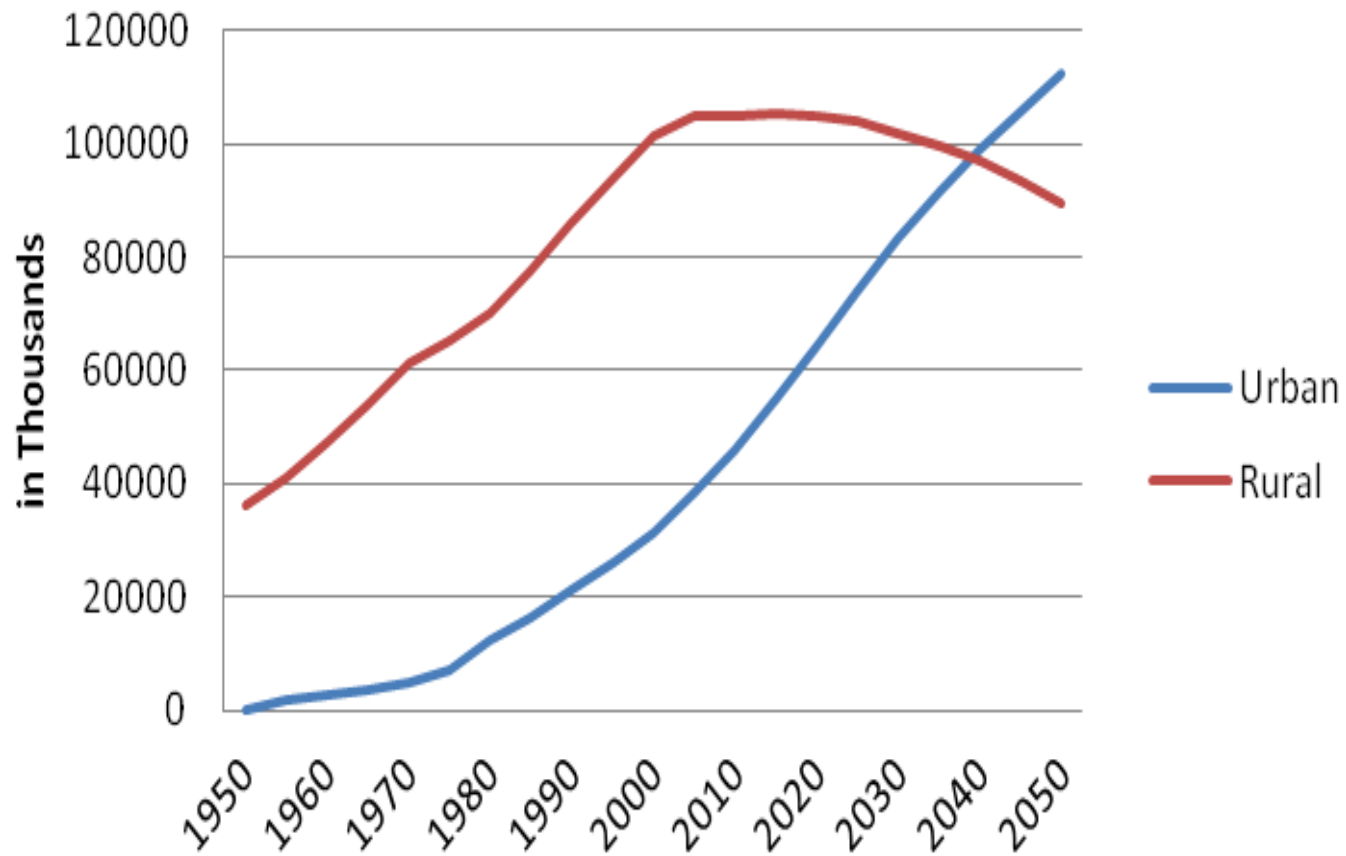
Source: BBS, 2011

20°15'N 20.96 - 181.98 Source: BBS, 2011

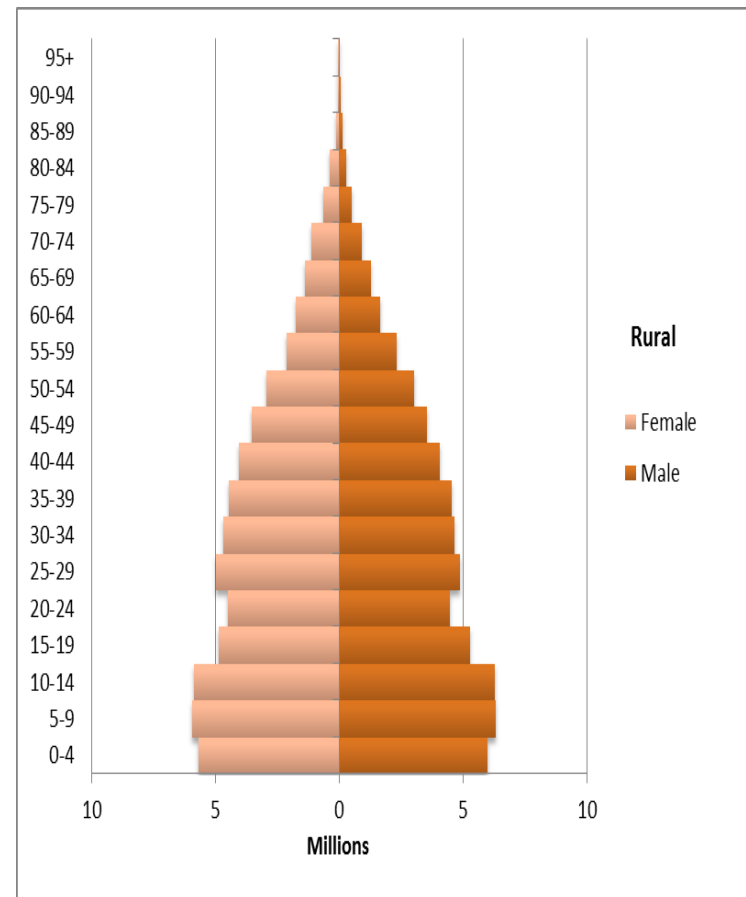
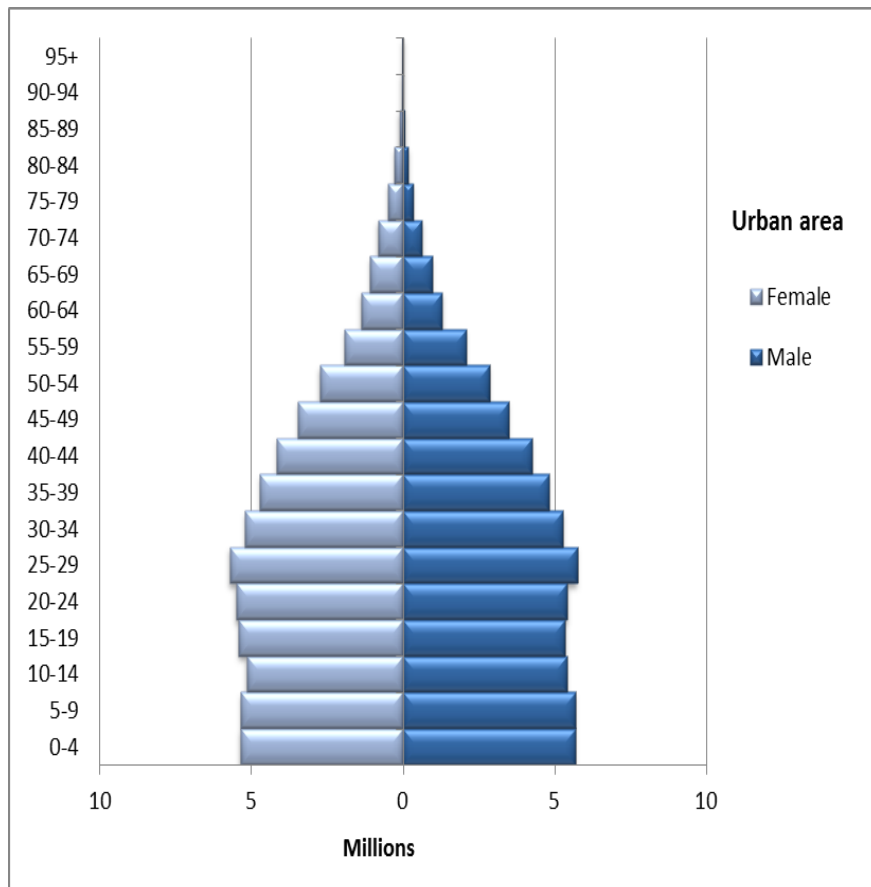
Future population growth will be entirely in urban areas

- **Expected population growth 2015-2035**
 - **Indonesia - 50 million, 20 per cent increase**
 - **Bangladesh - 39 million, 24 per cent increase**
- **How is this growth to be accommodated?**
 - **In situ urbanization**
 - **Further growth of cities and towns**

Growth of the Urban and Rural Populations of Bangladesh, 1960-2010, and projected to 2050



Indonesia: Urban and Rural Age Pyramids, 2010



Indonesia: educational attainment of household population, urban and rural, 2012 (%)

	Incomplete primary or less	Completed primary/ incomplete secondary	Completed secondary or more	Total
MALE (aged 15+)				
Urban	22.9	39.4	37.7	100.0
Rural	37.2	47.2	15.6	100.0
Total	30.0	43.8	26.8	100.0
FEMALE (aged 15+)				
Urban	27.2	39.5	33.3	100.0
Rural	42.1	45.0	12.9	100.0
Total	34.7	42.3	23.0	100.0
FEMALES AGED 15-49				
Urban	8.7	43.0	48.3	100.0
Rural	19.8	58.6	21.6	100.0

Bangladesh. Percentage of households possessing various household effects and means of transportation, by residence, 2014

Possession	Urban	Rural	Total
Housing – earth or sand floor	32.5	81.5	67.8
Household effects			
Radio	3.2	3.6	3.5
Television	70.6	33.0	43.5
Mobile telephone	93.4	86.7	88.5
Non-mobile telephone	4.2	0.5	1.6
Refrigerator	40.6	12.3	20.2
Electric fan	85.9	48.5	59.0
DVD/VCD player	12.1	4.8	6.8
Computer/laptop	11.8	2.4	5.1
Means of transport			
Bicycle	16.7	28.4	25.1
Motorcycle/scooter	8.0	5.7	6.4
Rickshaw/van	5.5	5.5	5.5
Animal drawn cart	0.2	0.1	0.1
Car/truck/microbus	1.2	0.6	0.8

Indonesia: Percent distribution of the population by wealth quintiles, by residence, 2012

Area	Wealth quintile					
	Lowest	Second	Middle	Fourth	Highest	Total
DKI Jakarta	22.5	17.6	14.8	27.8	47.2	100.0
Urban	16.4	13.6	21.0	26.4	32.7	100.0
Rural	33.5	26.4	19.0	13.7	7.4	100.0
Total	20.0	20.0	20.0	20.0	20.0	100.0

Indonesia: Percentage of households possessing various household effects and means of transportation, by residence, 2012

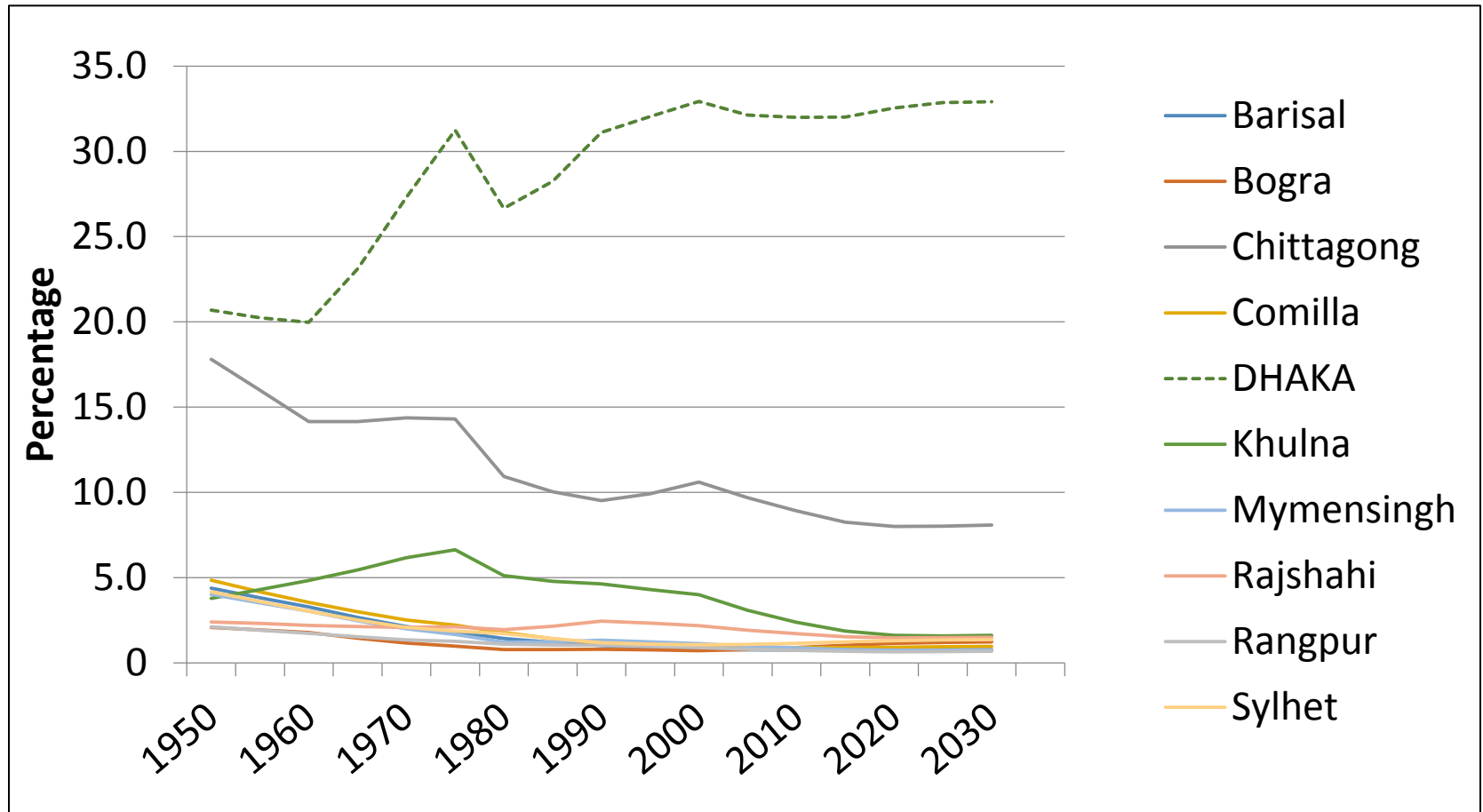
Possession	Urban	Rural	Total
Household effects			
Radio	39.6	27.8	33.6
Television	91.7	74.8	83.2
Mobile telephone	90.7	75.5	82.9
Non-mobile telephone	11.5	11.0	11.2
Refrigerator	55.5	24.7	39.8
Means of transport			
Bicycle	45.2	38.9	42.0
Motorcycle/scooter	73.2	60.7	66.8
Rowboat	10.6	12.4	11.5
Boat with a motor	10.7	11.6	11.1
Animal drawn cart	10.2	10.1	10.1
Car/truck	12.3	15.1	13.6
Ship	10.1	10.1	10.1

City size distributions

Urban primacy

- Jakarta – 20% of Indonesia's urban population
- Dhaka – 37% of Bangladesh's urban population
- 4-city primacy index
 - Dhaka – 2.12
 - Jakarta – 1.57

Proportion of Bangladesh's urban population in 10 largest cities, 1950-2030

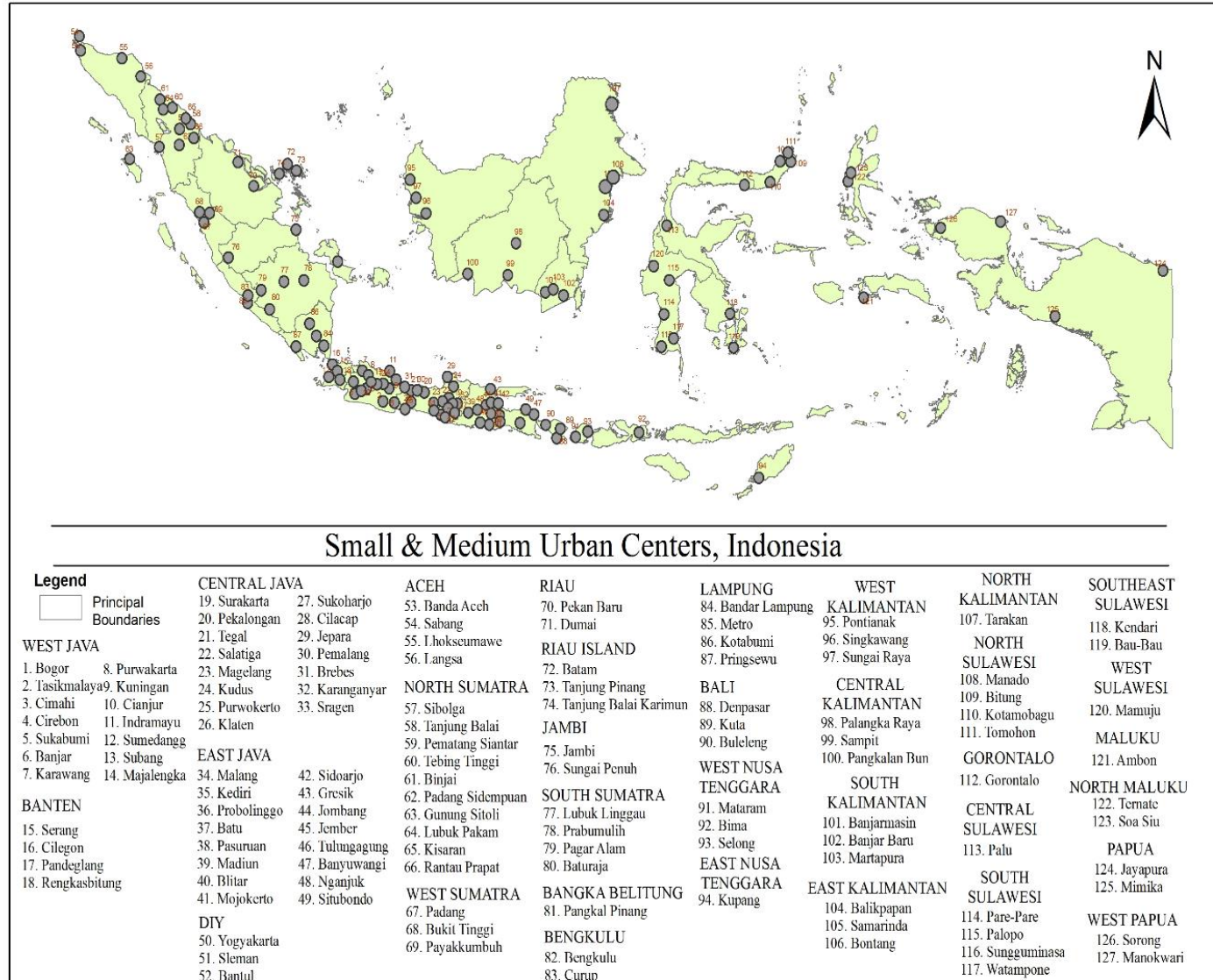


Indonesia: role of secondary cities

- In Java, the secondary cities grew only slowly over the 2000-2010 period
- But we need to study the growth of those which were not “Kota Otonom” (e.g. Karawang, Pandeglang, Ciamis, Jember, Jombang)
- World Bank says medium-sized cities (populations half to one million) have performed better than smaller cities. Some smaller cities have declined – lack of infrastructure and skilled labour, poor access to major cities and ports
- Small and medium urban centres in outer islands are doing better.
Annual growth over 2000-2010 period:

• Batam 8.0%	Pekanbaru 4.4%	Bontang 3.7%
• Sorong 7.0%	Den Pasar 4.0%	Samarinda 3.4%
• Jayapura 5.1%	Dumai 3.9%	Blikpapan 3.1%
• Tarakan 5.2%	Kendari 3.7%	

Small and Medium Urban Centers in Indonesia (Population 100,000 to 1 Million)



Mega-urban
regions (MURs)

Donut growth and fringe area transformation

- Indonesia's official metropolitan areas are the hole in the donut – population increasing very slowly
- The donut ring – areas outside the official city – increasing very rapidly. Annual percentage increases are as follows (2000-2010)

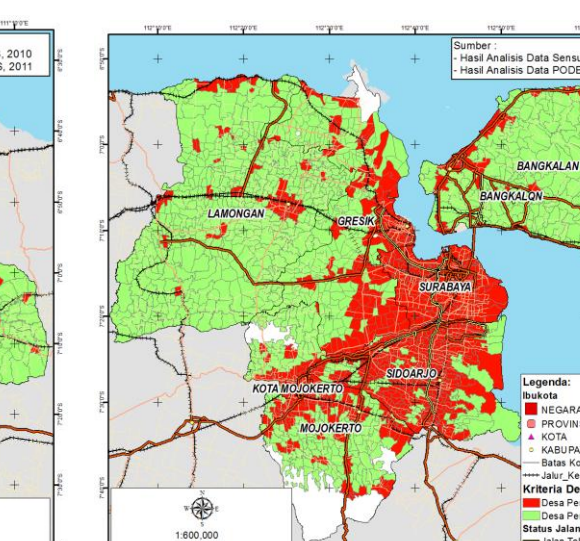
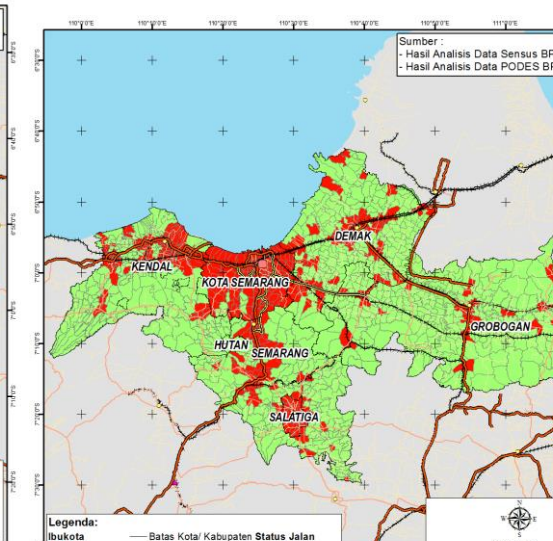
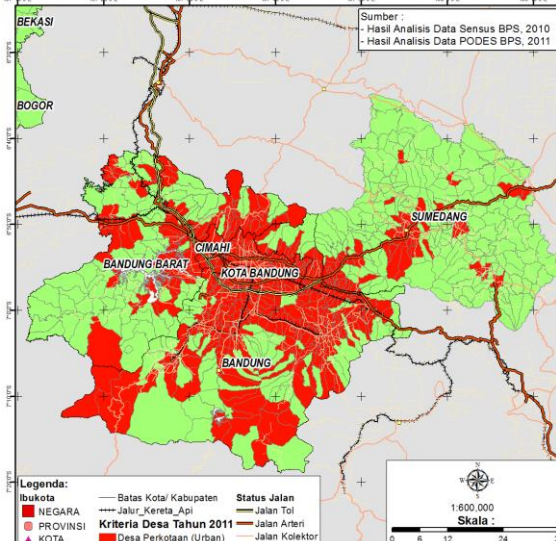
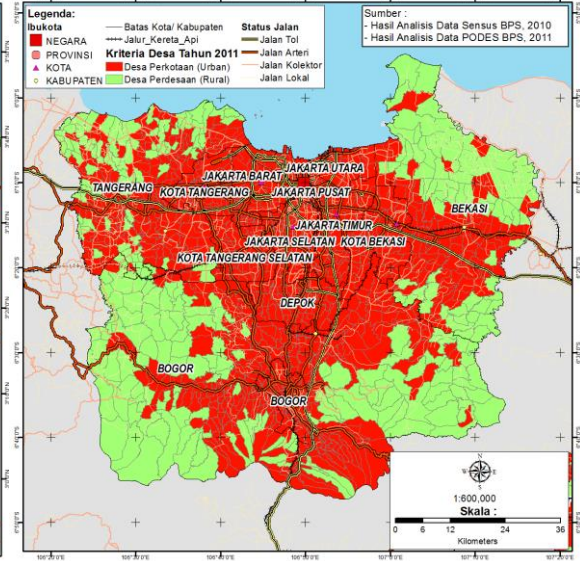
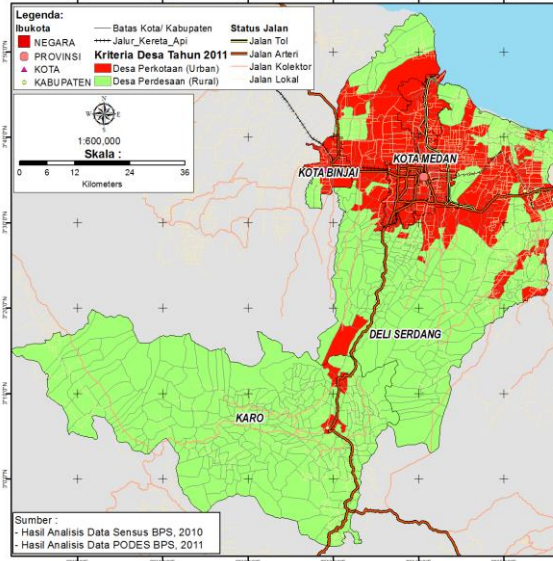
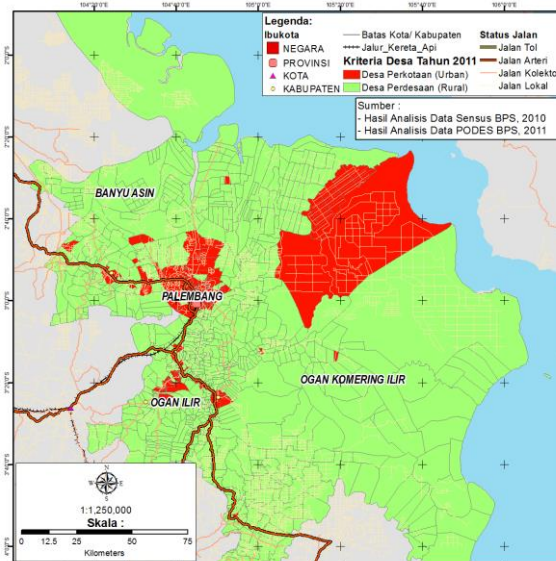
	Core	Periphery	MUR
Jakarta	1.4	5.6	3.8
Surabaya	0.7	2.8	1.8
Bandung	1.2	4.6	3.3
Medan	1.1	2.5	1.7
Semarang	1.5	2.6	2.0
Makassar	2.2	5.8	2.7

Crucial to focus on the MUR as a whole – otherwise the wrong policy conclusions can easily be drawn

**Five-year in-and out-migrants, DKI Jakarta,
1980=2010 (in thousands)**

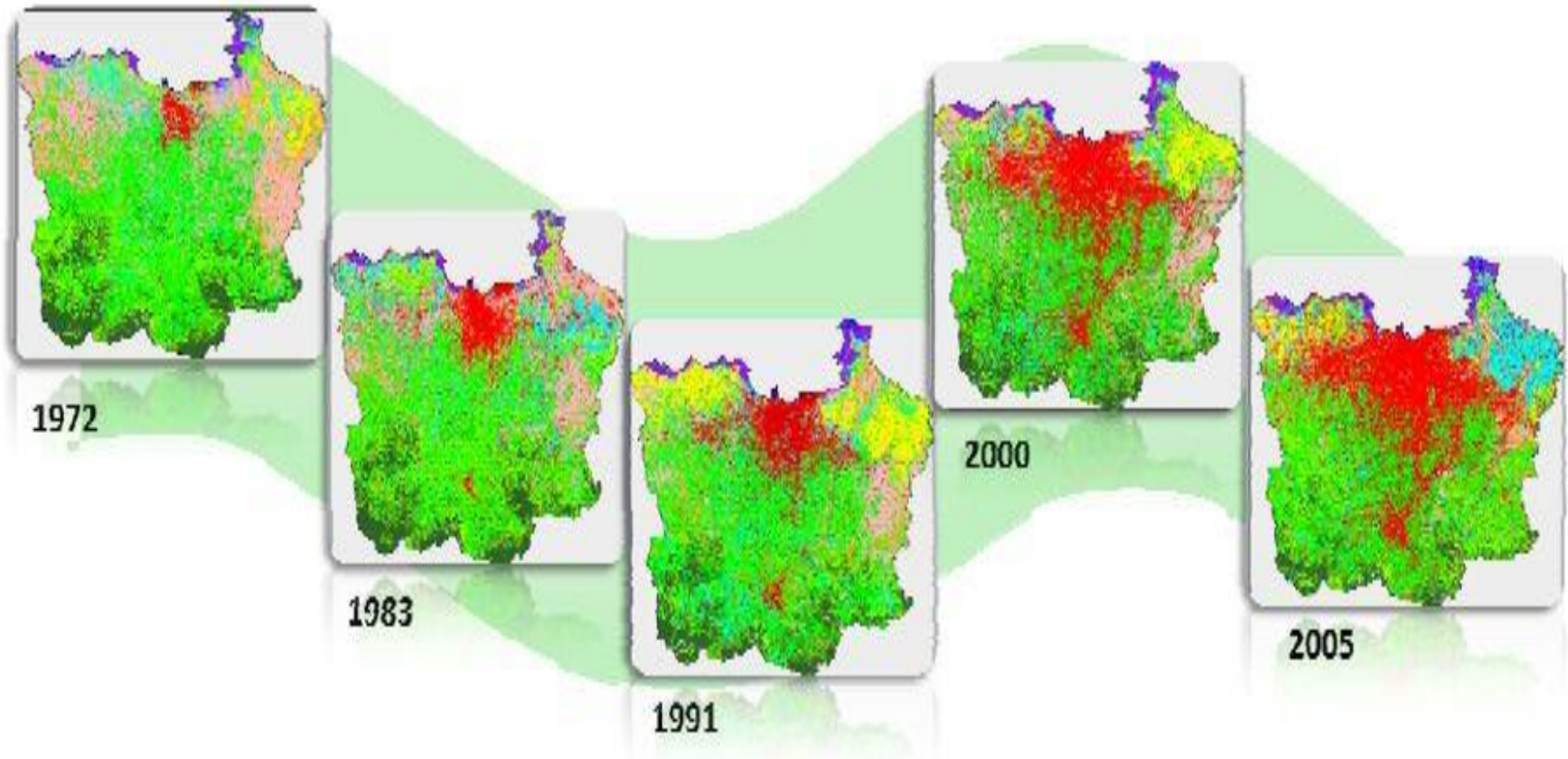
In/out-migrants	1980	1990	2000	2010
In-migrants	746.9	819.6	702.2	635.9
Out-migrants	382.3	993.4	850.3	883.4
Net migrants	364.6	-173.8	-148.1	-247.5

Maps of the main mega-urban regions in Indonesia

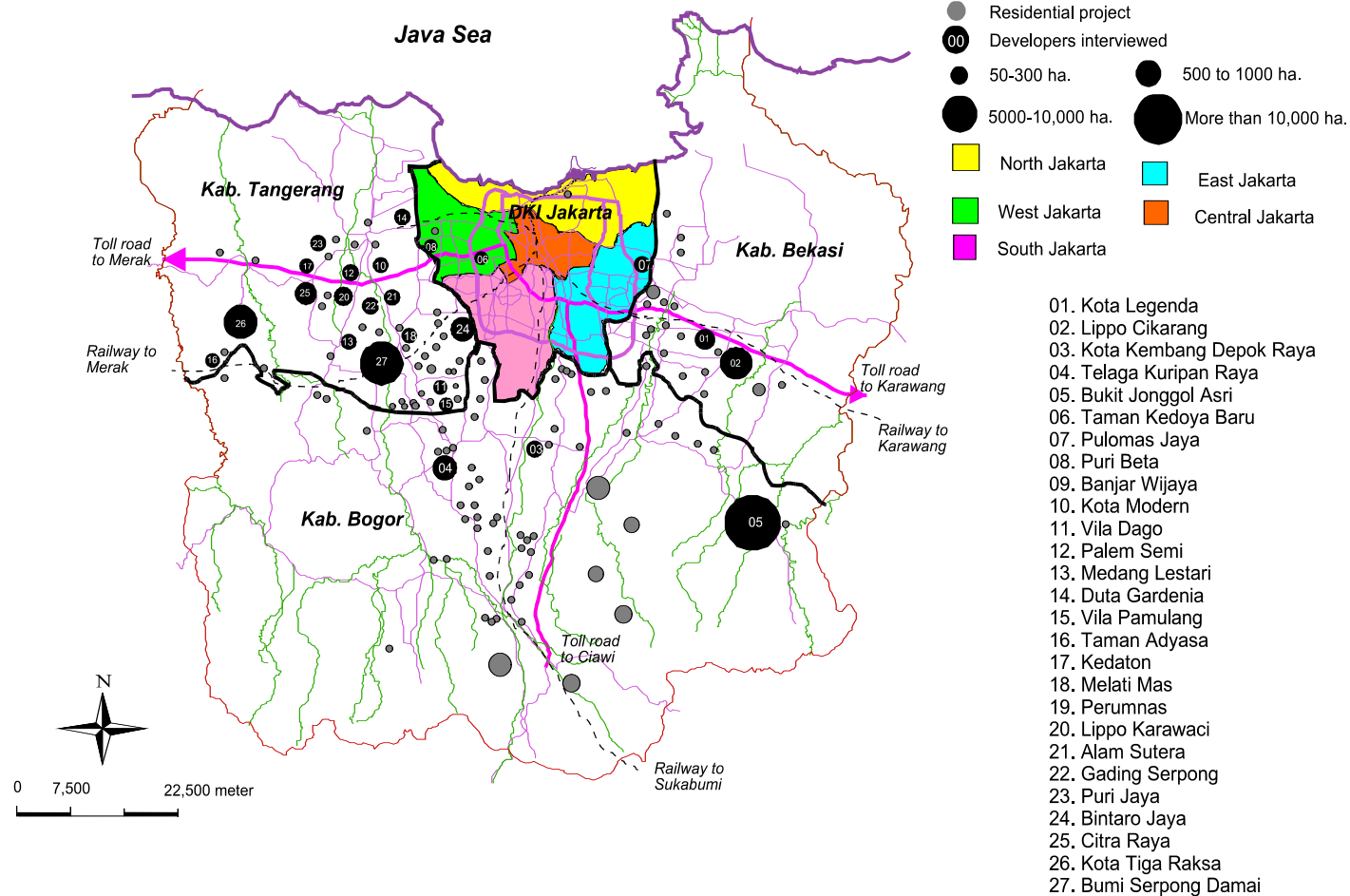


JABODETABEK – INDONESIA'S FOREMOST MUR

Expansion of built-up area of Jakarta over time



New residential developments in Jabodetabek, 2010



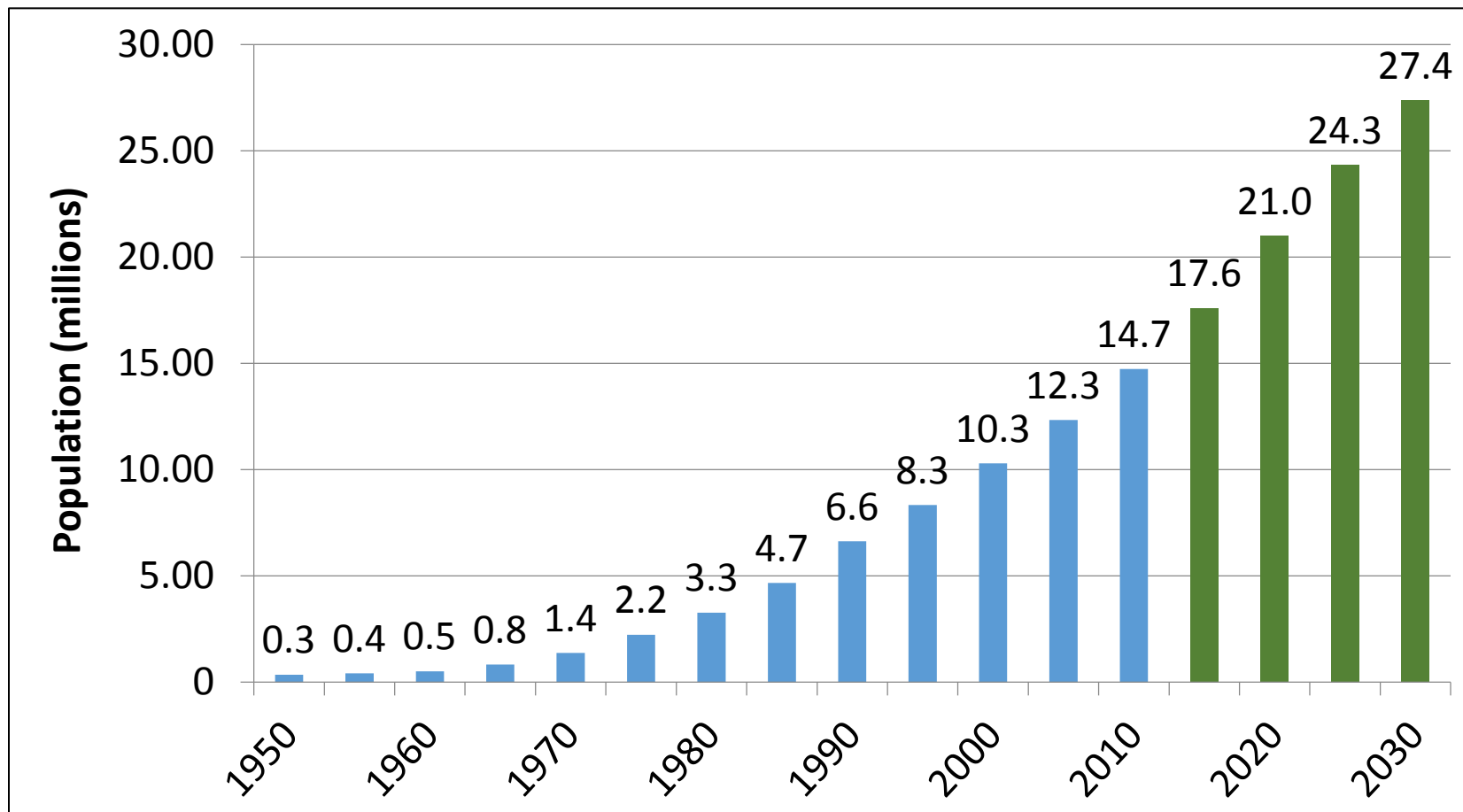
Population of Indonesia's major Mega-urban regions, 2010

Mega-urban region	Population 2010		Urban proportion of the MUR population (%)	Share of core* in the:		MUR's share of Indonesian population (%)
	Urban areas only	Urban and rural areas		MUR population (%)	MUR urban population (%)	
Jakarta (Jabodetabek-Punjur)	26,147,936	28,626,735	91	34	37	12.0
Surabaya (Gerbangkertosusila)	6,182,485	8,919,329	68	31	45	3.8
Bandung (Bandung Raya)	6,793,054	8,002,462	85	30	35	3.4
Medan (Mebidangro)	3,724,787	4,223,775	88	50	56	1.8
Semarang (Kedungsepur)	3,174,290	6,049,946	52	26	48	2.5
Makassar (Maminasata)	1,849,507	2,484,475	74	54	73	1.0
Palembang (Palembang Raya)	1,686,515	3,287,648	51	44	81	1.4
Denpasar (Sarbagita)	1,613,388	1,791,360	90	44	49	0.8

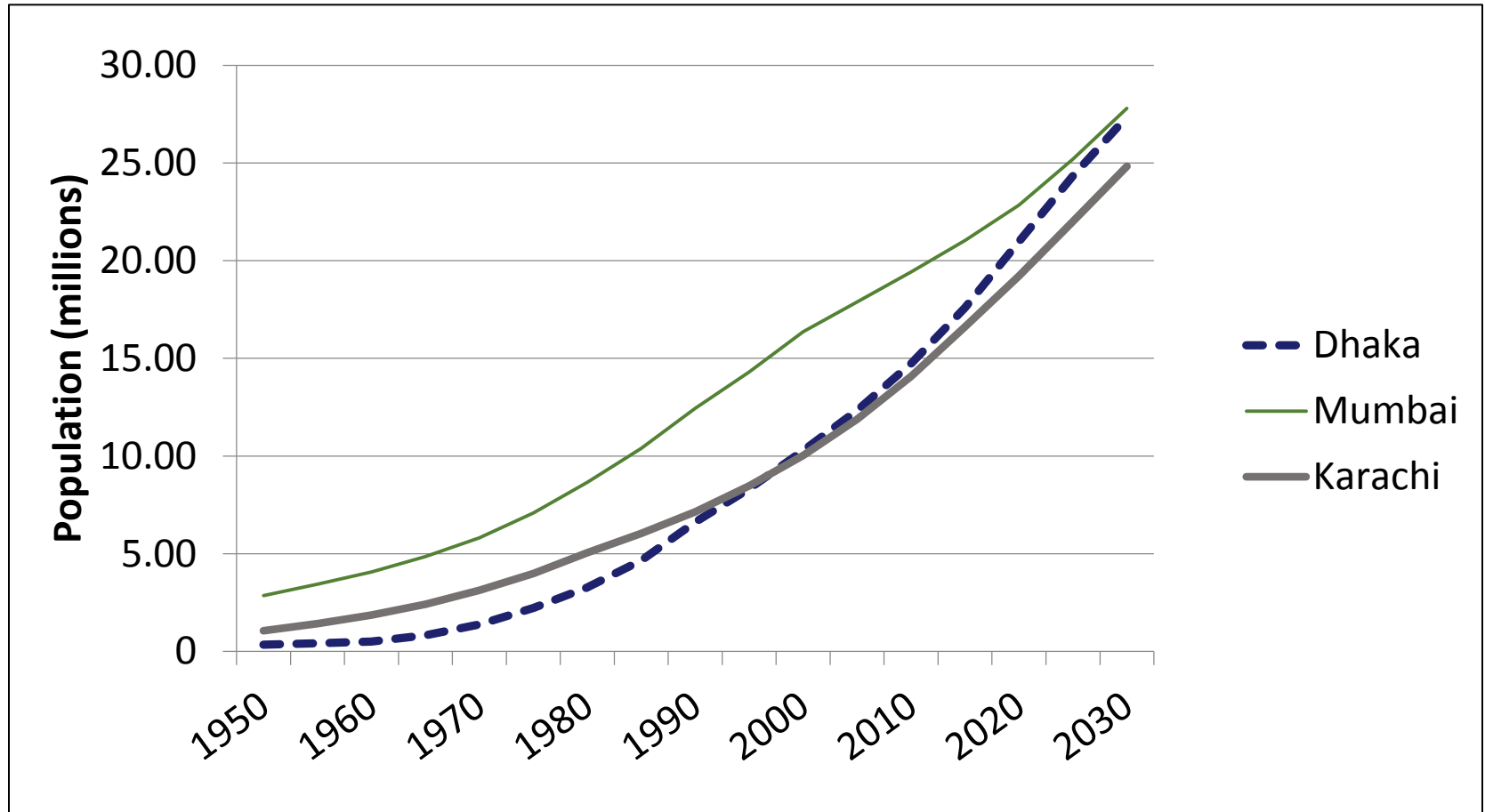
Percent of National Population and GDP by Metropolitan Areas in Java, 2010

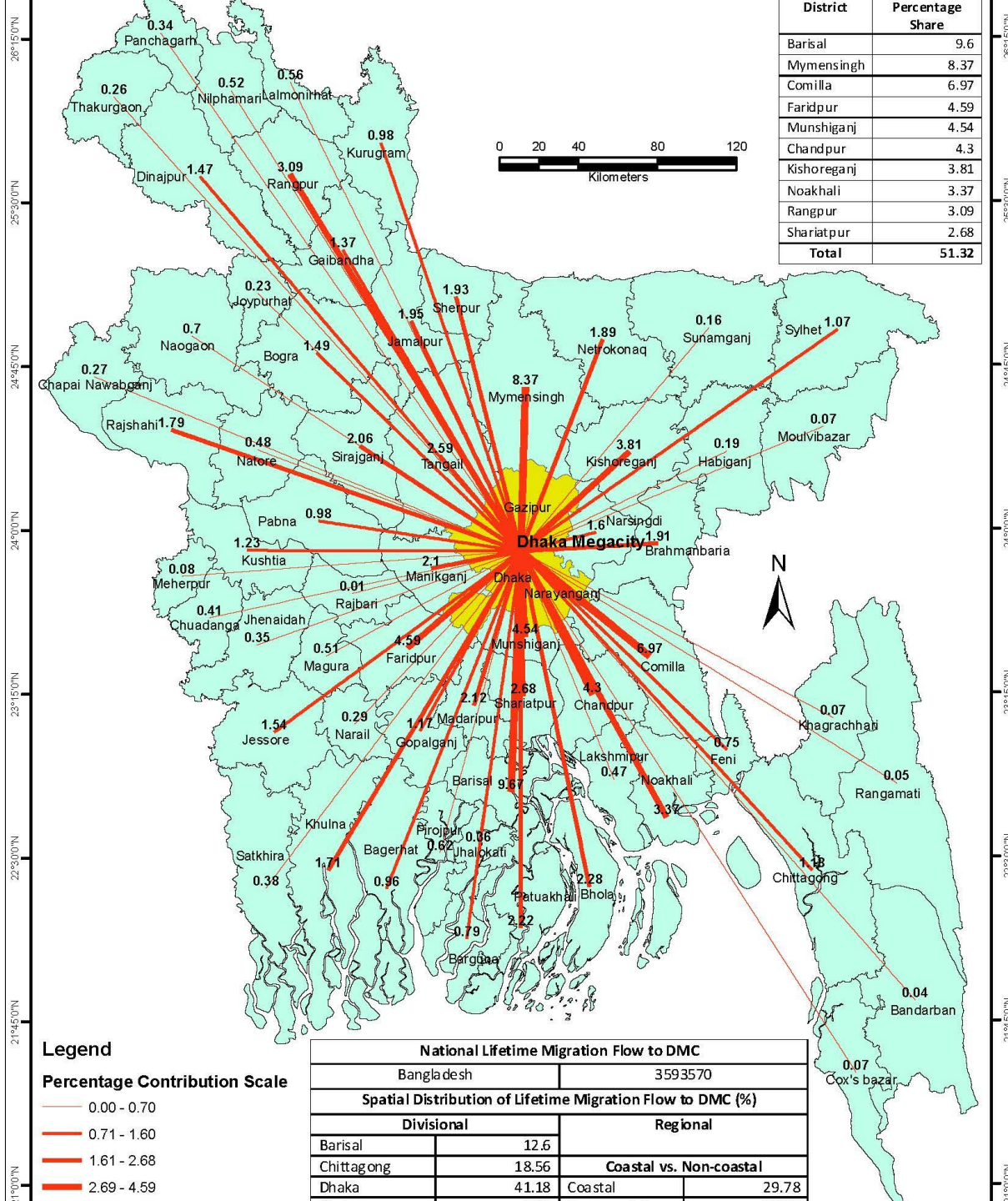
Agglomeration	Population 2010 (million)	Percent of Indonesia's population	Percent of Indonesia's GDP
Jakarta (Jabodetabek)	26.15	11.0	25.3
Surabaya (Gerbangkertosusila)	16.22	2.6	6.7
Bandung (Bandung Raya)	6.79	2.9	3.3
Semarang (Kedungsepur)	3.17	1.3	1.8

Actual and projected population of Dhaka, 1950-2030



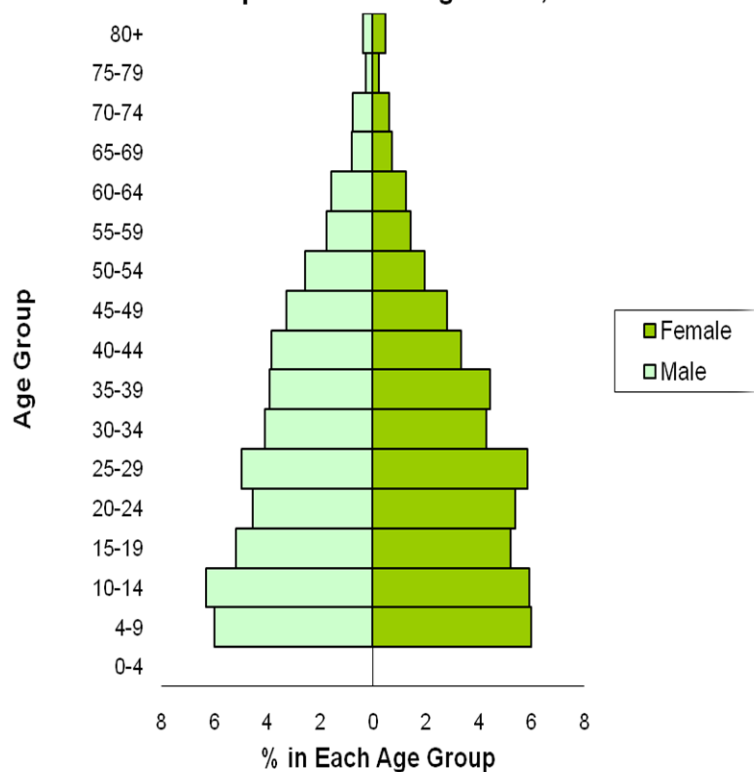
Actual and projected population of Dhaka, Mumbai and Karachi, 1950-2030



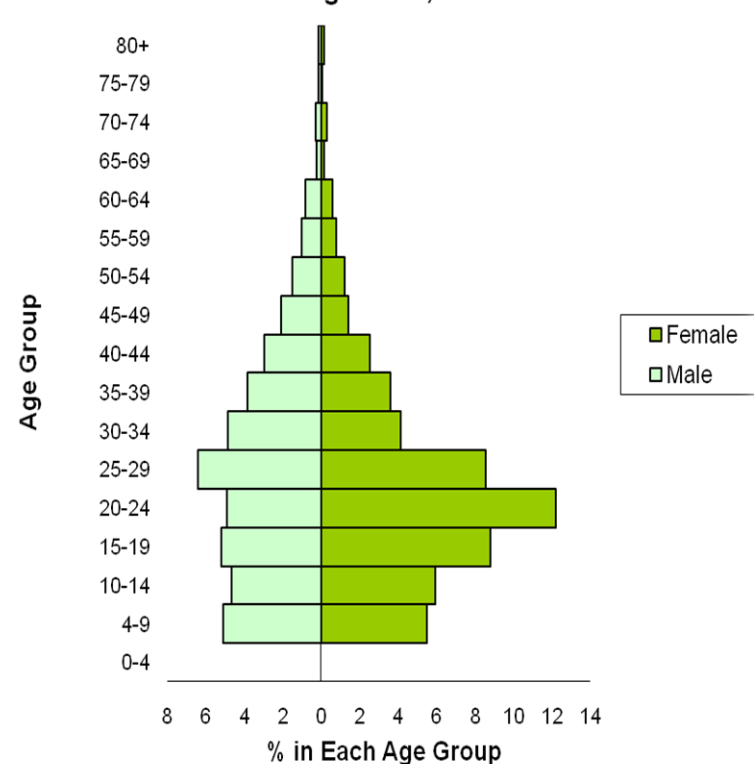


Females dominate recent migration to urban areas in Bangladesh

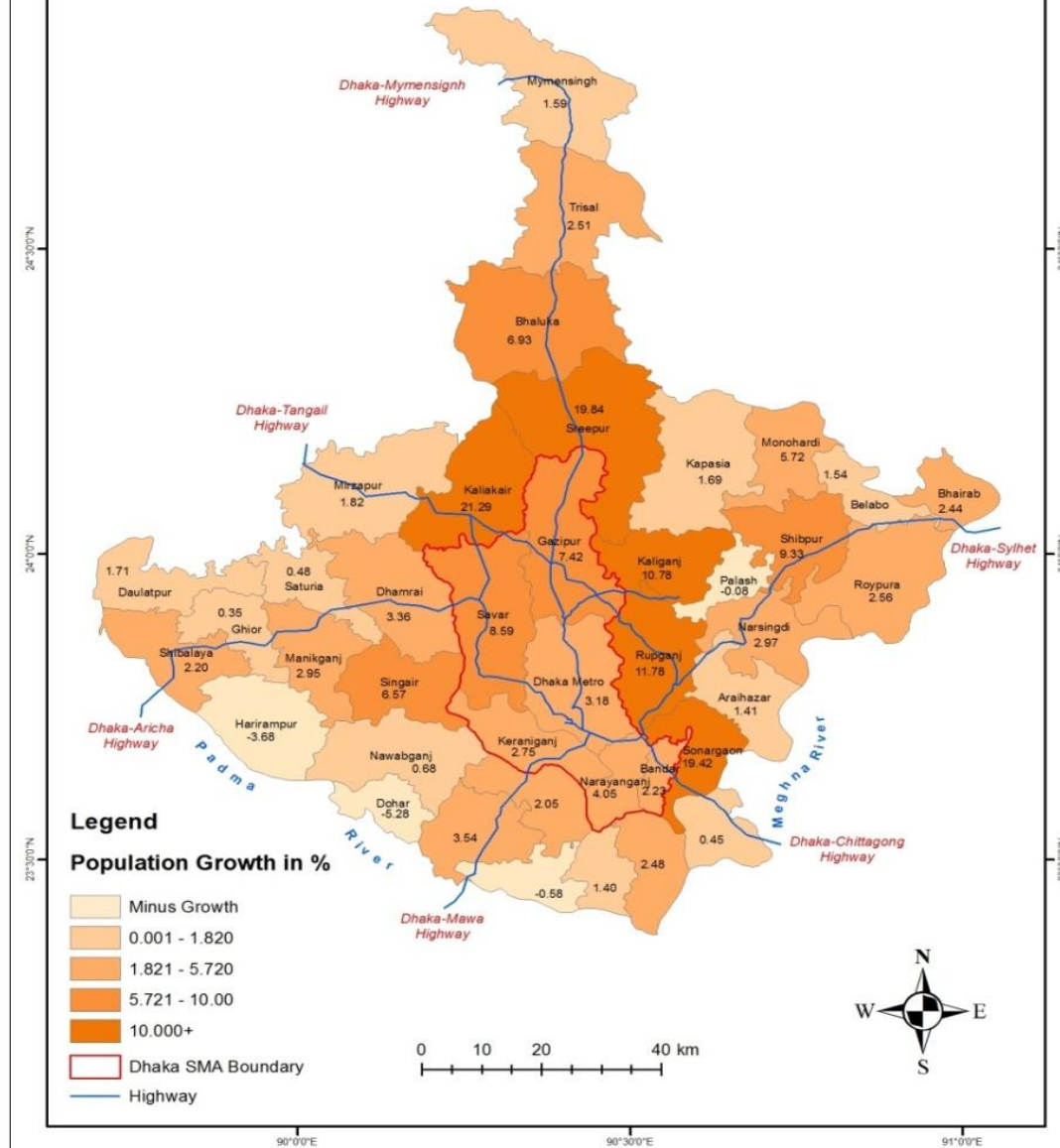
Age-Sex Structure of Non-migrant Urban Population in Bangladesh, 2011



Age-Sex Structure of Recent Urban Migrants in Bangladesh, 2011



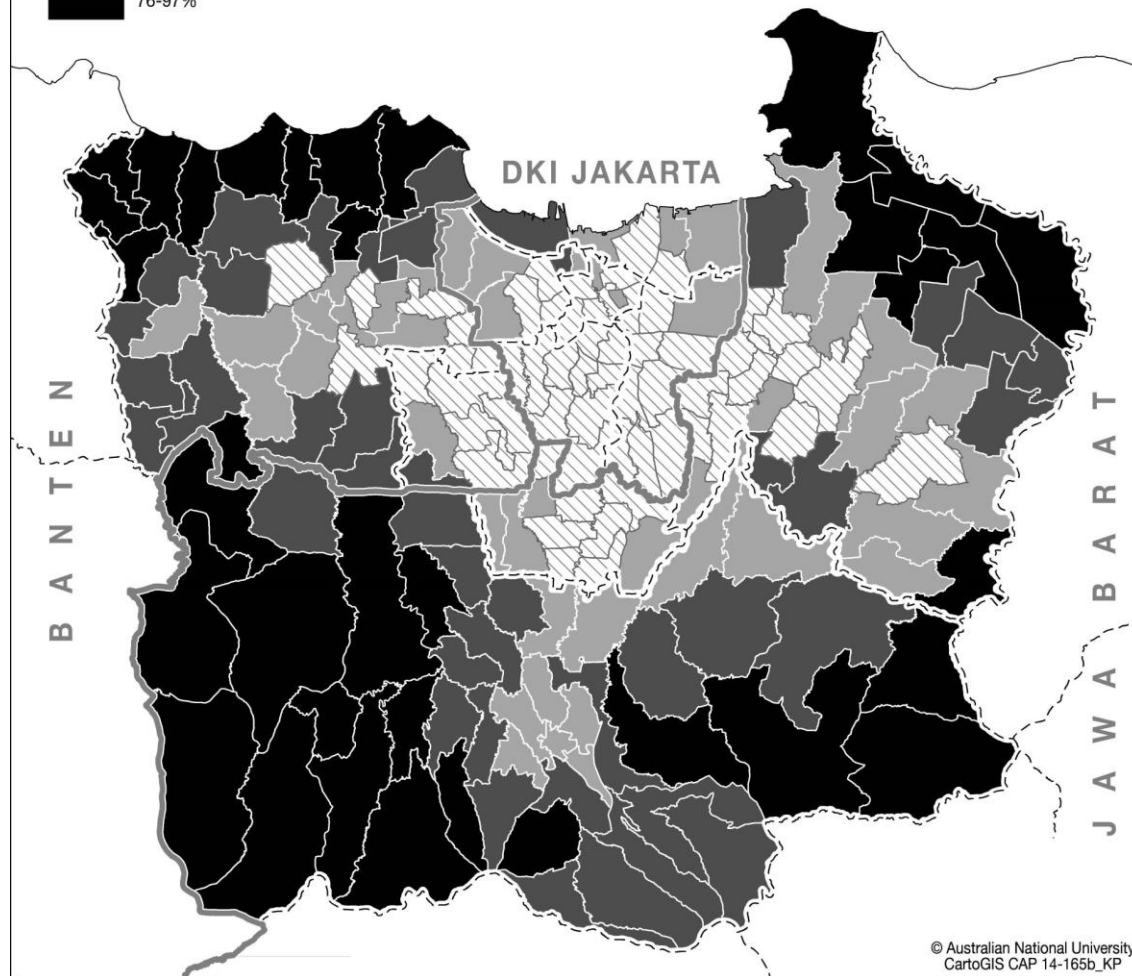
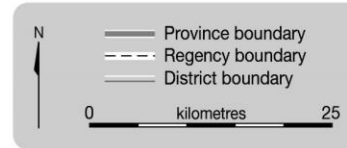
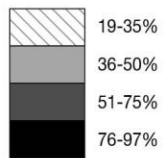
Annual Average Growth of Urban Population within and outer Dhaka SMA 2001-2011



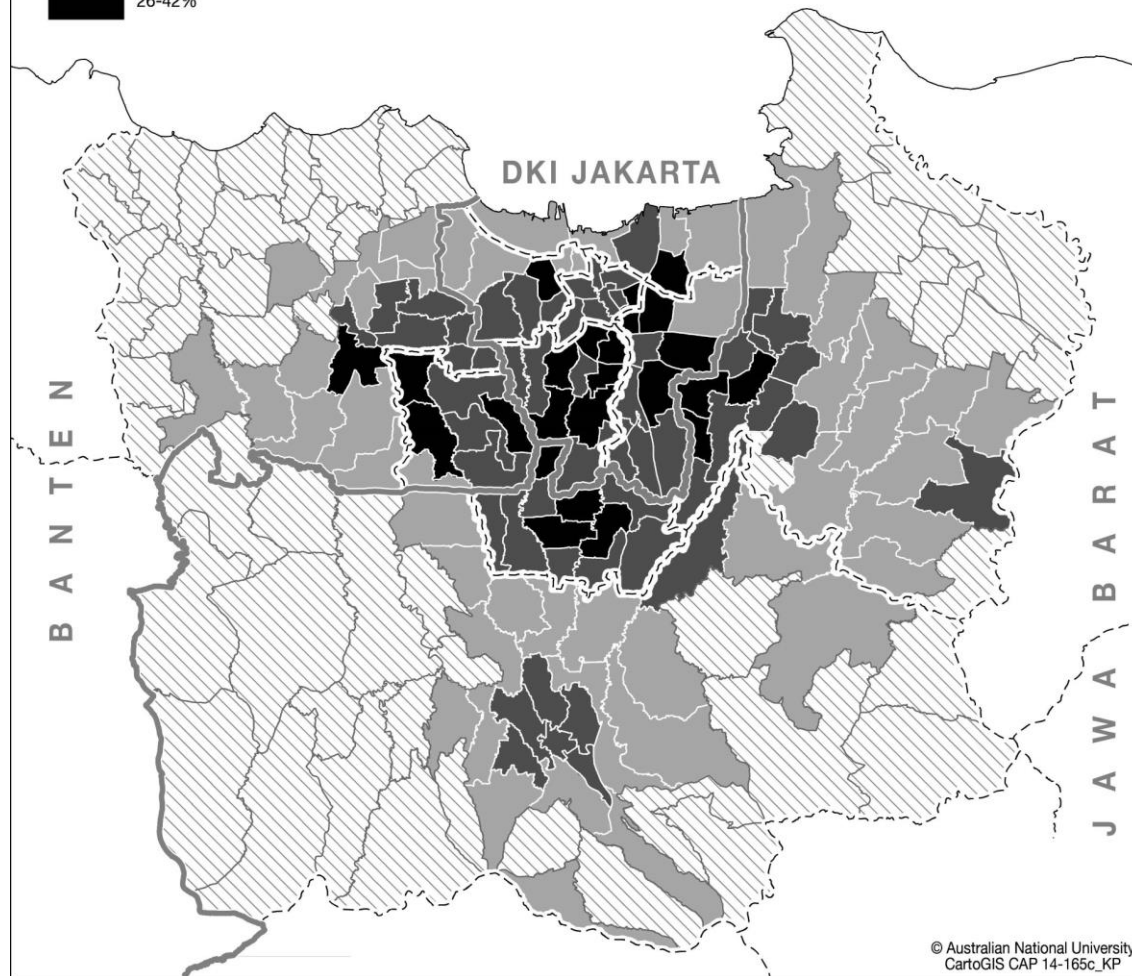
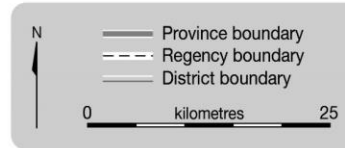
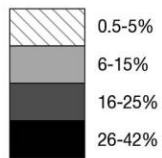
Migration has played a crucial role in changing the educational characteristics of the Jabodetabek population

- See following maps
- Cities of Bekasi, Depok and Tangerang Selatan have somewhat higher educational attainment than Jakarta.
- This is clearly because of selectivity in migration patterns
- In DKI Jakarta, at aged 25-39, migrants, on average, are more poorly educated than the local population
- Urban areas of Bodetabek – at ages 25-39, migrants are much better educated, on average, than the local population
- So migration is lowering the educational attainment in Jakarta and raising it in urban Bodetabek

Jakarta Mega-Urban Region 2010
Percentage of 25-39 year olds who have
completed junior high school or less



Jakarta Mega-Urban Region 2010
Percentage of 25-39 year olds who have
completed tertiary education



Conclusions and recommendations

- For Bangladesh, in situ urbanization could play a key role in ameliorating the problems of massive growth in Dhaka
 - Lessons from Japan, Korea, Taiwan?
 - Some benefits (?) of extreme density
 - Environmental concerns in Bangladesh urbanization
- An increasingly urbanized Indonesia
 - Risk of increasingly urban-focused planning
 - Reaping the benefits of agglomeration?
 - West of the Central Java-West Java border – in 2035, 90% urban, 76 million urban population
- Increasing the livability of cities in the two countries
- Urban governance and community involvement
- Many research needs

THANK YOU