

# Poverty and Inequality in Asia

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# Income distribution

- Growth-focused economies often ignore the poverty and income inequality on the expectation that income will **trickle down**.
- Recent studies tend to acknowledge that the effects of redistribution of income are on average pro-growth (Ostry et al., 2014; Dabla-Norris et al. 2015).
  - **The poor and the middle class can be the driving force for growth** via interrelated economic, social and political channels.
  - Well-targeted social policies; for example, better access to healthcare and education, and fair labour market policies; for example, labour market institutions that are fair to the poor, can stimulate the income share for the poor and the middle class.

# Poverty

- 'Asia and the Pacific has slashed extreme poverty by more than half, well ahead of the 2015 target, but is still home to 1.6 billion people who live on \$US2.00 a day or less and almost three-quarters of the world's underweight children. **Meanwhile about 600 million people in the region have no access to electricity and 1.7 billion still lack improved sanitation, leaving a huge amount of work still to be addressed by the post-2015 Sustainable Development Goals'** (ADB, 2015)

- **Poverty**

# Problems in poverty Measures

- **National poverty lines** converted to 2005 \$US PPP terms: India \$1.33, PRC \$1.46, Thailand \$1.75, the Philippines \$1.84 (ADB, 2013).
- **Using the \$US1.25** poverty line in South Asia, poverty reduced from 620 million people in 1990 (**HC ratio 50%**) to around 399 million people in **2011(HC ratio 19%)**.
- **Using the \$US1.90** per day HC ratio shows that 309 million people are in poverty in South Asia.
  - Using the \$US1.90 poverty line in China, poverty reduced from 755 million people (HC ratio 67%) in 1990 to around 149 million people in 2010 (HC ratio 11%).
- **Based on MPI**, 55.3 per cent of the people in India (**632 million people**) were in poverty, and among them, around 27.8 per cent experienced severe poverty. This is higher than the normal HC (under \$US1.90) in India, which is 21.3 per cent (**260 million people**).

# Head Count or absolute number?

- The HC ratio has been reducing under the defined poverty line over time; however, this may not reflect the severity of the problem from a policy perspective.
  - China's HC under the \$US1.90 has been falling, from about 67 in 1990 to 11 in 2010. However, **150 million people are still in poverty.**
  - the HC under the \$US1.90 poverty line in Laos PDR is 30%, representing around 2 million people. India's HC ratio was **around 21%, which represents 259 million people.**
  - more attention needs to be paid to India for poverty alleviation than Laos PDR, based on the absolute number of poor.

Selected countries	Survey year	Population			\$US1.25/day				\$US1.90/day			
		Urban	Rural	Total	HC (%)	Urban	Rural	Total	HC (%)	Urban	Rural	Total
		(million)	(million)	(million)		(million)	(million)	(million)		(million)	(million)	(million)
Bangladesh	2010	46	105.1	151.1	43.3	19.9	45.5	65.4	43.7	20.1	45.9	66
India	2011–12	381.9	839.2	1,221.2	32.6	124.5	273.6	398.1	21.3	81.3	178.7	260.1
Nepal	2010–11	4.5	22.3	26.8	23.7	1.1	5.3	6.4	15	0.7	3.3	4.0
Pakistan	2010–11	63.4	109.8	173.1	12.7	8.1	14	22.1	8.3	5.3	9.1	14.4
Sri Lanka	2009–10	3.7	16.7	20.5	4.1	0.2	0.7	0.8	1.7	0.1	0.3	0.4
South Asia	2010	499.7	1093.3	1593	29	144.9	317.1	461.9	27.2	135.9	297.4	433.3
Cambodia	2011	2.9	11.7	14.6	10.1	0.3	1.2	1.5	8.9	0.3	1.0	1.3
China	2011	679.8	664.4	1,344.1	9.2	62.5	61.1	123.7	11.2	76.1	74.4	150.6
Indonesia	2011	123.6	120.2	243.8	18	22.3	21.6	43.9	15.9	19.7	19.1	38.8
Laos	2012	2.4	4.3	6.6	30.3	0.7	1.3	2	30	0.7	1.3	2
Malaysia	2009	19.5	8.3	27.8	0	0	0	0	0.3	0.1	0.0	0.1
Philippines	2012	43.3	53.4	96.7	19	8.2	10.1	18.3	13.1	5.7	7.0	12.7
Thailand	2010	29.3	37.1	66.4	0.3	0.1	0.1	0.2	0.1	0.0	0.0	0.1
Vietnam	2012	28.1	60.7	88.8	2.4	0.7	1.5	2.2	3.2	0.9	1.9	2.8
East Asia	2010	928.9	960	1,888.8	10.3	95.7	98.9	194.5	11.2	104.0	107.5	211.6
Total	2010	1,428.6	2,053.3	3,481.8	18.8	268.6	386	654.5	16	228.6	328.5	557.1

# Urban poverty is increasing

- Traditionally, policy makers target rural poverty. **Urban slum** populations are evidence of the nature of urban poverty in Asia.
  - In Asia, the rapid pace of urbanization is evidenced, and **urban poverty has become a recent focus.**
  - New definitions: deprivations (marginalised locations, health services), polarization (segregated into clusters)



## Urban people in slums

Source: United Nations (2015).

Country	1990 (million)	1995 (million)	2000 (million)	2005 (million)	2007 (million)	2009 (million)	2014 (million)	Change (%)
Bangladesh	20	23.5	25.8	27.8	27.8	27.5	29.3	47
India	121	122.2	119.7	112.9	109.1	104.7	98.4	-19
Nepal	1.2	1.6	2.1	2.6	2.8	3.1	2.8	133
Pakistan	18.1	20.7	23.9	27.2	28.5	30	32.3	78
Sri Lanka	0.8	-	-	-	-	-	-	-
Cambodia	1	-	-	2.1	-	-	1.7	70
China	131.7	151.4	169.1	183.5	182.9	180.6	191.1	45
Indonesia	27.6	29	29.7	24.8	22.5	23.3	29.2	6
Laos	-	-	-	1.3	-	-	0.8	-
Philippines	16.4	17.2	17.6	18	18.1	18.3	17.1	4
Thailand	3.2	-	-	5.5	5.8	6.1	8.3	159
Vietnam	8.1	8.9	9.43	9.5	9.4	9.2	8.3	2

## Gini index: selected countries years (in percentages)

Country	Early of 1990s	Early of 2000s	Early of 2010s
Bangladesh	27.6	33.46	32.12
India	<b>30.82</b>	<b>33.38</b>	<b>33.60</b>
Nepal	35.23	43.83	32.82
Pakistan	33.23	30.39	29.63
Sri Lanka	32.48	41.06	36.40
Cambodia	38.28	35.53	33.55
China	<b>32.43</b>	<b>42.59</b>	<b>42.06</b>
Indonesia	<b>29.19</b>	<b>29.74</b>	<b>35.57</b>
Laos	30.43	32.47	36.22
Malaysia	47.65	37.91	46.21
Philippines	43.82	46.09	43.03
Thailand	45.27	42.84	39.37
Vietnam	35.68	37.55	39.25

# Rural and Urban Gini index and MLD index in selected countries

Source: Wold Bank (2015b).

	China*				India				Indonesia			
	Gini index		MLD index		Gini index		MLD index		Gini index		MLD index	
	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban
1993	32.13	28.45	18.98	13.40	28.59	34.34	13.93	19.29	25.97	35.34	11.03	20.49
2004	35.85	34.80	21.33	20.89	30.46	37.59	15.94	23.33	26.53	34.31	11.37	19.05
2009	39.40	35.15	25.93	20.77	29.96	39.28	15.48	25.65	29.53	37.11	14.29	22.77
2011	38.50	35.56	24.84	21.13	31.12	39.05	16.58	25.50	34.02	42.15	18.71	29.35

# Urban inequality and urban poverty

- Urban inequality is rising more than rural inequality.
- Research question: Will urban inequality aggravates urban poverty?
  - Well-targeted social policies; for example, better access to healthcare and education, and fair labour market policies; for example, labour market institutions that are fair to the poor, can stimulate the income share for the poor and the middle class.
  - Middle class is the driving force

- **Urbanisation**

- Import substituting industries
- Trade facilitation (upgrading transport infrastructure, eliminating state inefficiencies, reforming customs, and removing non-tariff trade barriers and promoting exports)

## Urbanisation: Percentage of population in urban areas, 1950–2030

Year	1950	1980	2000	2005	2010	2015	2020	2025	2030
<b>Economy</b>									
<b>Bangladesh</b>	4.3	14.9	23.6	26.8	30.5	34.3	38.0	41.6	44.9
<b>India</b>	<b>17.0</b>	23.1	27.7	29.2	30.9	<b>32.7</b>	34.8	37.0	<b>39.5</b>
<b>Nepal</b>	2.7	6.1	13.4	15.2	16.8	18.6	20.6	22.7	25.1
<b>Pakistan</b>	17.5	28.1	33.2	34.7	36.6	38.8	41.2	43.8	46.6
<b>Sri Lanka</b>	15.3	18.8	18.4	18.4	18.3	18.4	18.8	19.6	20.9
<b>Cambodia</b>	10.2	9.9	18.6	19.2	19.8	20.7	22.0	23.6	25.6
<b>China</b>	<b>11.8</b>	19.4	35.9	42.5	49.2	<b>55.6</b>	61.0	65.4	<b>68.7</b>
<b>Indonesia</b>	<b>12.4</b>	22.1	42.0	45.9	49.9	<b>53.7</b>	57.2	60.3	<b>63.0</b>
<b>Laos</b>	7.2	12.4	22.0	27.4	33.1	38.6	43.5	47.7	50.9
<b>Malaysia</b>	20.4	42.0	62.0	66.6	70.9	74.7	77.7	80.1	81.9
<b>Philippines</b>	27.1	37.5	48.0	46.6	45.3	44.4	44.3	44.9	46.3
<b>Thailand</b>	16.5	26.8	31.4	37.5	44.1	50.4	55.8	60.4	63.9
<b>Vietnam</b>	11.6	19.2	24.4	27.3	30.4	33.6	36.8	39.9	43.0

## Asia: urban/rural population in million, 2015 and projected 2030

Source: UN DESA (2014).

Year	2015			Projected 2030			Difference		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
Bangladesh	55.0	105.4	160.4	83.2	101.9	185.1	28.2	-3.5	24.7
India	<b>419.9</b>	<b>862.5</b>	<b>1,282.4</b>	<b>583.0</b>	<b>893.3</b>	<b>1,476.4</b>	<b>163.1</b>	<b>30.9</b>	<b>194.0</b>
Nepal	5.3	23.1	28.4	8.2	24.6	32.9	2.9	1.5	4.4
Pakistan	72.9	115.2	188.1	107.9	123.9	231.7	35.0	8.6	43.6
Sri Lanka	4.0	17.6	21.6	4.9	18.4	23.3	0.9	0.8	1.7
South Asia*	<b>557.1</b>	<b>1,123.9</b>	<b>1,681.0</b>	<b>787.2</b>	<b>1,162.1</b>	<b>1,949.3</b>	<b>230.1</b>	<b>38.2</b>	<b>268.3</b>
Cambodia	3.2	12.4	15.7	4.9	14.2	19.1	1.7	1.8	3.5
China	779.5	622.1	1,401.6	998.9	454.4	1,453.3	219.4	-167.7	51.7
Indonesia	137.4	118.3	255.7	184.9	108.6	293.5	47.5	-9.7	37.8
Laos	2.7	4.3	7.0	4.5	4.3	8.8	1.8	0.0	1.8
Malaysia	22.9	7.8	30.7	30.2	6.7	36.8	7.3	-1.1	6.2
Philippines	45.2	56.6	101.8	59.2	68.6	127.8	14.0	11.9	26.0
Thailand	34.0	33.4	67.4	43.1	24.4	67.6	9.2	-9.0	0.2
Vietnam	31.4	62.0	93.4	43.7	58.1	101.8	12.4	-3.9	8.4
East Asia*	<b>1,056.3</b>	<b>917.0</b>	<b>1,973.2</b>	<b>1,369.5</b>	<b>739.3</b>	<b>2,108.8</b>	<b>313.2</b>	<b>-177.7</b>	<b>135.5</b>
Total	<b>1,613.4</b>	<b>2,040.9</b>	<b>3,654.2</b>	<b>2,156.7</b>	<b>1,901.4</b>	<b>4,058.1</b>	<b>543.3</b>	<b>-139.5</b>	<b>403.8</b>

- **Demography**
  - **Natural growth**
  - **Migration**



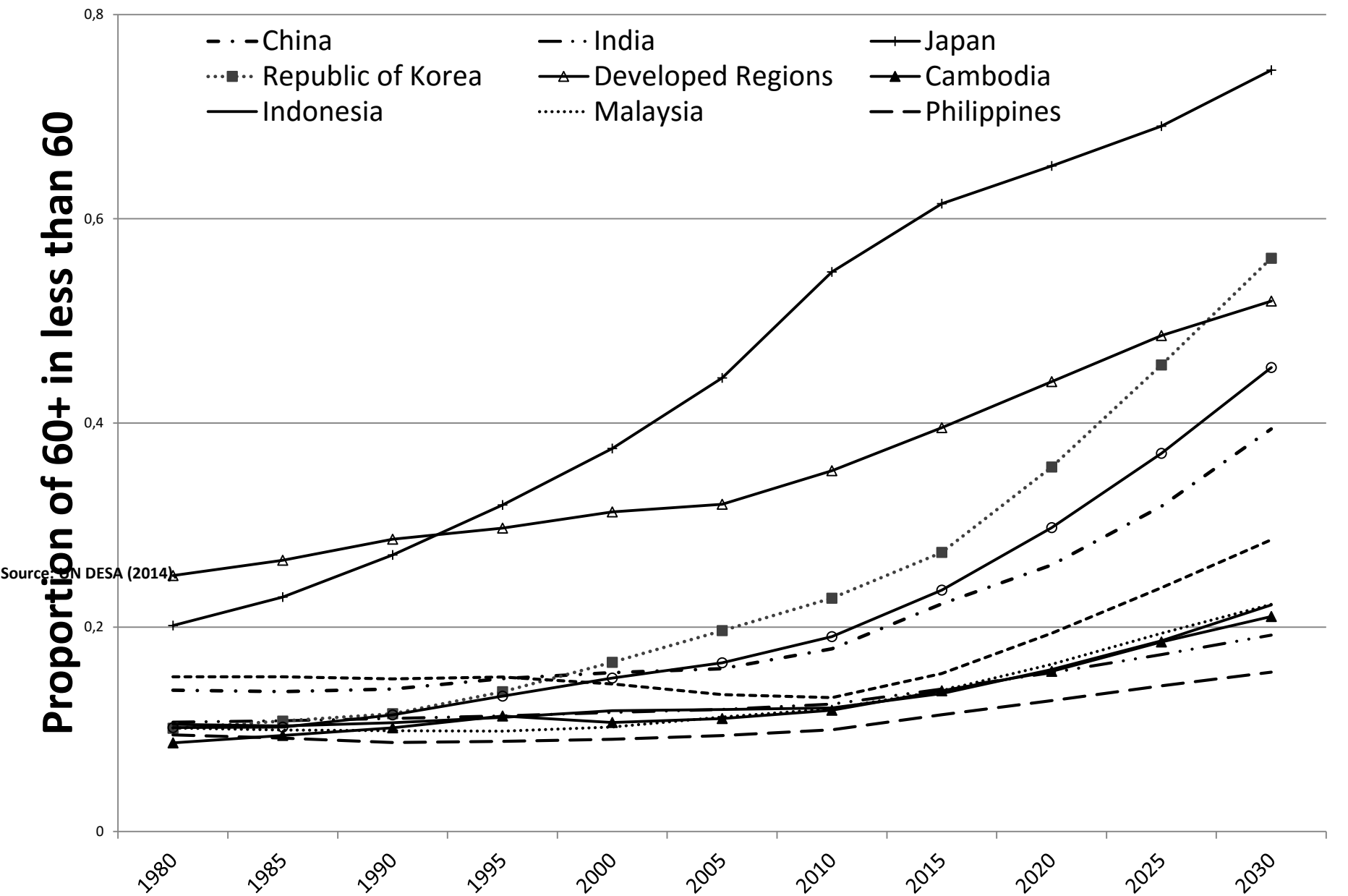
## Annual population growth in Asia (Dowling 2010)

	Annual rate of population growth, 1965-1990	Population growth rate 2005-2010
China	2.35	0.58
Korea	2.01	0.33
Taiwan	2.45	0.36
India	2.97	1.46
Indonesia	2.82	1.16
Malaysia	3.66	1.69
Philippines	3.74	1.72
Thailand	3.26	0.66
Singapore	2.46	1.19

# Policies to reduce population growth in Asia

- Family planning and contraceptive use
  - Government initiatives are well in place, yet their net effect on family formation continue to be small.
- Improvement in women's education
  - Raise the opportunity costs of having children, substitute quality of children for quantity, women determining family size, decline in infant mortality rate.
- Economic incentives and disincentives
  - Late 1970s, Singapore govt imposed tax penalties if more than 2 children. Recently, tax benefits increased with larger family size.
- Coercion and quotas
  - India 1982: Sterilization for men was encouraged and coercion was even used.
  - China 1982: One child policy (in 2000, male to female ratio 117 boys to 100 girls). In 2000, permitted two 'only child' couples can have 2 children

# Ageing and dependency ratios



# Aging population: causes

- Reasons for increased aging population
  - lower death and birth rate
  - restrictions on migration
  - retirement age is 55 or 60.
- Coverage of public pension schemes are limited in Asia
- Health care for the elderly is not regarded as high priority in Asia. Instead more concerned about meeting health care demand for basic preventive, curative and reproductive services.
- Rapid aging need to be addressed as this has potentials to create other economic problems such as diminishing consumption, declining tax income and declining savings and investments.

# Impacts (Yale Global Online)

- The elderly represent 10% to a projected 22% consumption, less saving, more investments in health and long-term care.
- Problems: dementia, long-term care, management of chronic diseases or end of life programs.
- Actions: disease prevention, pensions, part-time work opportunities, expanding social networks, grandparents, drug prices, subsidizing life, life long savings for old age and insuring against major illness.

# Impacts

- In elimination of labour shortages
  - labour-saving production technology and
  - the relocation of labour-intensive production processes are on agenda
- Economically active population have been declining
  - Japan South Korea and Taiwan are on the extreme of rapid aging
  - Malaysia and Thailand are in the pipeline and
  - China is having one-child policy for long time.

# Migration

- **Internal migration:**
  - Rural-to-urban migrations only comprise around 8 per cent of all internal migration for Indonesia (Sugiyarto et al., 2014), but 23 per cent for India (Parida, 2014). The number of rural migrants in China stood at 20 per cent of China's total population, and this was around 274 million people (OECD, 2015).
- **Across Border migration:**
  - The largest migration in the Asia–Asia corridors occurred between **South Asian countries and Western Asian oil-producing countries, and in Middle Eastern countries due to war**
  - East Asia and Southeast Asian corridors such as China–Korea, Cambodia–Thailand, Philippines–East Malaysia, Indonesia–East Malaysia and Myanmar–Thailand have also attracted migrant movements, but of a small number. Singapore and Malaysia attract incoming migrants and continue to have positive net migrant inflows.
  - The majority of these East Asia and Southeast Asian migrants within the region consists of workers in the form of temporary, seasonal and cyclical migration of skilled, semiskilled and unskilled workers in Asia.

# International migration

- International migration is highly limited in Asia.
  - The 1995 multilateral ASEAN Framework Agreement on Services (AFAS) started to recognize cross-border migration.
  - The proposed ASEAN Economic Community (AEC) commenced in 2015, and may also be a good background, and the Mutual Recognition Arrangements (MRAs) work classification is considered a decent start, although it needs to be extended to unskilled workers.



# Natural growth + migration

- A rise in urban population growth occurs as migrants add to the existing natural growth rate.
- With urbanization, **fertility tends to decline** at a more rapid pace among urban migrants, mainly because of the higher costs of raising children, a more educated population, higher age at marriage and greater access to contraception.
- **Urban fertility rates need consideration to determine the ageing, dependency and urban poverty/inequality.**
  - The structure of the urban population with respect to age, gender and other population characteristics tends to change.

- **Infrastructure**

# Lack of infrastructure spending

- Demographic changes in rural to urban migration may demand better infrastructure.
  - **Increased congestion and pollution**, and increased demand for utilities and construction activities, go hand in hand with increased population in urban cities.
  - **Urban population pressure** will reflect in infrastructure spending in the form of road, water and sewerage, electricity, telecommunications, and housing and hospital facilities for the growing population.
  - **Marginalized locations** with poor transport facilities, lack of basic infrastructure and health services manifest poverty.
  - **The expectation is that infrastructure development will reduce the costs of production, increase production capacity, improve connections to markets and key facilities and provide additional jobs. This should all eventually reduce poverty.**

# Lack of infrastructure spending

- Global spending on infrastructure and capital projects is expected to increase from \$US4 trillion in 2012 to \$US9 trillion by 2025. **Asia's emerging economies accounted for 30.4 per cent of global spending in 2012, and this is expected to increase to 47.7 per cent by 2025.**
- The regional and across regional connectivity are in addition.  
connectivity
- The question is how much expenditure these countries can afford to overcome their infrastructure deficit.
  - The majority of these countries have a mismatch of 'fixed assets' and 'infrastructure' investments. Adjusting this mismatch is an option for getting better infrastructure.
  - For example, **the US invests around 13 per cent of GDP annually in fixed assets and around 3.3 per cent of GDP in infrastructure.**
  - Asian countries invest a far lower proportion in their infrastructure needs relative to 'fixed assets'.

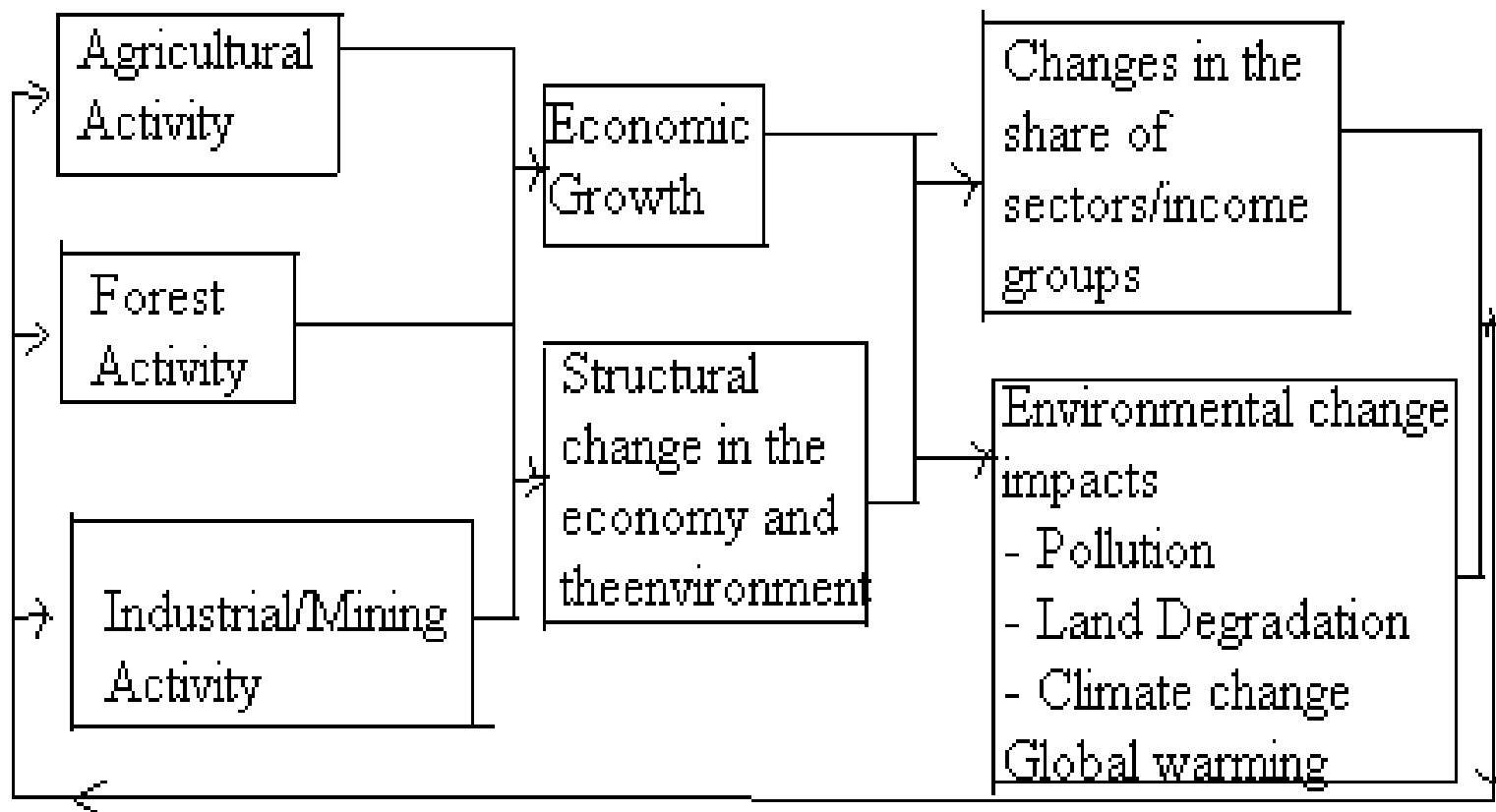
# Global competitiveness index (GCI) and infrastructure quality index (IQI): 2014–2015

Source: Global competitiveness report 2014–15 and \* ADB (2014).

Index Economy	GCI		Infrastructure (IQI)		Budget deficit (% of GDP, 2013*)
	Rank	Score	Rank	Score	
China	28	4.89	46	4.66	-1.8
India	71	4.21	87	3.58	-4.6
Malaysia	<b>20</b>	<b>5.16</b>	<b>25</b>	<b>5.46</b>	-3.9
Thailand	31	4.66	48	4.58	-1.8
Indonesia	34	4.57	56	4.37	-2.3
Vietnam	68	4.23	81	3.74	-4.7
Philippines	52	4.40	91	3.50	-1.4
Cambodia	95	3.89	107	3.05	-1.8
Laos	93	3.91	94	3.38	-3.9
Pakistan	129	3.42	119	2.66	-4.2
Bangladesh	<b>109</b>	<b>3.72</b>	<b>127</b>	<b>2.45</b>	-3.3
Sri Lanka	73	4.19	75	5.02	-5.9
Australia	22	5.08	20	5.60	-1.3
New Zealand	17	5.20	29	5.30	0.8

- **Environmental degradation**

# The economy and the environment



# Environmental degradation

- In 2010, China emitted around 8.3 billion tons of CO<sub>2</sub>. This is more than the combined total of Brazil (0.4 billion), France (0.3 billion), Germany (0.7 billion), United Kingdom (0.5 billion) and the US (5.4 billion). India and Japan together emit 3.1 billion tons annually (ADB, 2014). This was more than Germany's emissions in 2010 (0.7 billion). Thus, Asia is a major contributor of CO<sub>2</sub> emissions in absolute terms (ADB, 2014).
- In per capita terms Singapore, Malaysia and China individually contribute more than the world average of 4.5 tonnes. Also, in per capita terms, all greenhouse gases (carbon dioxide, nitrous oxide and methane) increased in most of the Asian countries between 2005 and 2010, with the largest increase of Cambodia at 77 per cent, China at 35 per cent and Vietnam at 29 per cent (ADB, 2014).



# Energy use and CO<sub>2</sub> emissions

Source: Author computed based on BP (2015) and IEA (2014).

Indicator	Primary energy use (% of world total)	Fossil fuel use (% of country total)	Renewables (% of country total)	CO <sub>2</sub> per capita (tons)
Economy				
Selected country	2014	2014	2014	2012
Bangladesh	0.2	98.9	0.4	0.39
China	<b>23</b>	<b>89.1</b>	<b>1.8</b>	<b>6.08</b>
<b>India</b>	<b>4.9</b>	<b>92.8</b>	<b>2.2</b>	<b>1.58</b>
Indonesia	1.4	96.8	1.3	1.76
Malaysia	0.7	96.7	0.3	6.70
Pakistan	0.6	88.7	0.1	0.77
Philippines	0.3	86.9	6.8	0.82
Singapore	0.6	99.7	0.3	9.36
Korea	2.1	86.3	0.4	1.83
Thailand	0.9	97.8	1.2	3.84
Vietnam	0.5	79.3	0.2	1.61
Regions				
North America	<b>21.8</b>	<b>84.3</b>	<b>2.6</b>	<b>16.06</b>
South & Central America	5.4	73.8	3.1	-
Europe & Eurasia	<b>21.9</b>	<b>79.3</b>	<b>4.4</b>	<b>7.00</b>
Middle East	6.4	99.2	-	7.72
Africa	3.2	91.9	0.7	0.95
Asia Pacific	41.3	90.3	1.8	10.58

# Environmental degradation

- ADB (2014: 22) says that Asia has seven of the ten most vulnerable countries in the world with regard to natural shocks.
- The region as a whole experienced around 38 per cent of global disaster-related economic losses between 1980 and 2009; and around 1.6 billion people in the East Asia and Pacific have been affected by disasters since 2000.
- Floods and storms are common and frequent relative to other disasters. The economic cost from floods has been at an increasing trend in Asia as the floods are frequently occurring. The overall economic cost of floods for the region increased around five times since 1980. The cost has been increasing, particularly for South, East and Southeast Asia.

## Economic exposure of Asia Pacific subregions to floods (billions of constant \$US2000)

Source: ADB (2014) (cited from Bonapace et al. (2012)).

Year	1980	1990	2000	2010
Subregions				
East and North-East Asia	4.6	8.3	14.4	27
South-East Asia	2.4	3.9	6.4	10.7
South and South-West Asia	4.5	6.9	11.2	20.6
North and Central Asia	1.2	1.4	1	1.6
Pacific	0.4	0.5	0.7	0.9
Total	13.1	21	33.7	60.8

# Conclusion

- The research on interdependencies between poverty and urbanization-related issues (demographic imbalance, gap in infrastructure and environmental degradation) in Asia are still in their infancy and require further investigation.