

India 2050: A Strategy for Dispersed Urbanisation for Inclusive Growth

G. N. Kathpalia
Rakesh Kapoor

Alternative Futures
www.alternativefutures.org.in

Foresight Agrimode-Terra for 2050: The Indian Perspective

New Delhi | 7-9 December 2017

Three transformations to India 2050

- Structural transformation of the economy – from agriculture-based (contribution to GDP in 1971 over 40%) to services-based economy (contribution of service sector to GDP in 2016 over 53%)
- Rapid urbanisation – from 27.9% urban population in 2001 to about 55 % expected in 2050 (800 million plus)
- The demographic transition and booming population with a current median age of 27 – amongst the youngest in the world - creates the possibility of India reaping the demographic dividend

India: Structural transformation of the economy continues: distribution of GDP by sectors: 2006 to 2016

Year	Agriculture	Industry	Services
2006	18.29%	34.44%	46.60%
2007	18.93%	34.66%	46.40%
2008	18.44%	33.78%	47.78%
2009	18.39%	33.15%	48.46%
2010	18.88%	32.42%	48.70%
2011	18.53%	32.50%	48.97%
2012	18.20%	31.77%	50.03%
2013	18.59%	30.79%	50.62%
2014	18.02%	30.19%	51.80%
2015	17.46%	29.61%	52.93%
2016	17.35%	28.85%	53.80%

Land use Projections for 2050

YEAR	RECORDED LAND	CULTURABLE LAND	FOREST	NON-AGRICULTURE USE	BARREN
2006-07	305 mha	194	69	25	17
2050	305 mha	185	65	45	10

POPULATION DISTRIBUTION

YEAR	URBAN (%)	RURAL (%)	POOR and just above poverty line (%)
2011	31.3	68.7	50
<u>2050 desired scenario (detailed below)</u>	63.75	36.25	NIL

Land area of India by usage: projections for 2020 and 2050 (mha)

Usage	Area reported (1995-96)	Area reported (2005-06)	Projection for 2020	Projection for 2050
Culturable area	195*	194	185	185
Net sown area	142	142	142	142
(Net* irrigated area)	(54)	(60)	(65)	(65)
(Net rainfed area)	(88)	(82)	(77)	(77)
Area covered by trees and pasture#	15	14	15	20
Culturable waste land and fallows	38	38	28	23
Forest area	69	69	65	65
Non-agriculture use (urban, road, etc)	22	25	40**	45
Barren	19	17	15@	10@
Total area reported	305	305	305	305

Note: Fractions have been rounded off for 1995-96 & 2005-06.

* Net area refers to the actual area covered on the ground and should not be confused with the claimed irrigation potential.

This includes orchards and areas with low tree density, that are not classified forests and which yields fruits or NTFP, primarily for local use.

** Since pace of urbanization, industrialization and infrastructure growth have accelerated.

@ Some of the barren and degraded land would have to be improved and used for non-agriculture use.

Source: GOI, Ministry of Agriculture (2007) for current land area; projections by authors.

Land requirement for different non-agricultural purposes, 2050

1	Households	11.0 mha
2	Industries	15.0 mha
3	Roads, rail, airport & seaport	15.0 mha
4	Mining, rivers, etc	4.0 mha
	Total	45.0 mha

Urbanization Strategy for 2050

- Services sector (and industry) main contributor to livelihood and GDP.
- Agriculture sector - even after producing all the food and other items required for 1 60 crore population - would not be able to sustain more than 35% people with middle class income.
- Besides the larger cities, **4000 small towns of about 1.5 lakh population each** with all urban facilities (education and health services and skill-training) will be the hubs for urbanization and the key to inclusive growth for population in the surrounding villages.
- Employment in non-farm sector to be generated mostly in these 4000 small towns and 100 cities (about 10 lakh population each).
- This strategy/scenario is close to the Agrimonde-Terra Healthy and Regionalization scenarios

Population Distribution and Land Required in 2050

Type of settlement	Population per settlement	Number of settlements	Total population 2050	Population density/ hectare	Land requirement (mha)
Mega cities	2 crore	10	20 crore	400	0.5
Big cities	50 lakh	24	12 crore	400	0.3
Cities	10 lakh	100	10 crore	400	0.25
Small towns	1.5 lakh	4000	60 crore	200	3.0
Bigger villages	10 thousand	6,000	6 crore	100	0.6+0.1 for livestock
Small villages	2 thousand	260,000	52 crore	100	5.2+1.0 for livestock
Total		4,134 urban + 266,000 rural	160 crore		10.95 mha

Note 1: In this scenario 58 crore population, 36.25 per cent, will be rural, and 102 crore population, 63.75 per cent, will be urban.

Note 2: About 800 districts are expected by 2050 (as against 707 districts at present). A little over half of these districts will be rural districts, without major cities.

Note 3: With urbanization and consolidation of villages, total number of villages is expected to come down to 266,000 from 640,000 in 2011.

Note 4: A typical rural district will have 7 to 10 small towns, 10 to 15 bigger villages and 500 small villages. The majority of small towns and bigger villages (about 75%) will be located in the predominantly rural districts, while about 25% of small towns and bigger villages will be located in the more urbanized districts.

Why are Skills Critical?

- Between now and 2050 India is going to have amongst the youngest population in the world. But if youth do not have skills, we cannot reap the 'demographic dividend'.
- It is critical to provide employable skills of all types and at all levels (class X, XII and professional) to suit different sections of youth. Non-farm skills very important to enhance income of rural/farming families.
- Skills in **the health sector** (both holistic and specialist), **educational services, food processing, agro-based industries, small-scale industry** and in areas such as **hospitality and tourism** can all be based out of small towns.
- Skilled Indian workers will also be in demand globally.
- **Research and Innovation at Masters and PhD level – which will happen in bigger cities - is also critical for economic leadership.**

Transformative Challenges

- Creating the **right policies and environment** for enabling dispersed urbanisation and skill development among youth
- Productivity enhancement in irrigated as well as rainfed areas will enable **food security** for 1.6 billion Indians, without deforestation or large requirement of food imports
- **Climate change** is the big imponderable and disruptor – requires radical policy actions