

## 4

## Our Basic Resources

*Our strength*

- Our youth
- Our countrymen
- Their love for the nation
- The resources our mother earth has provided us

*Future of a nation can be seen in the eyes of its youth.*

*Sparkling with hope or blank with despair?*

We have compiled some data on our demography and resources which are self revealing. This will give us a glimpse of what we have and what we can achieve with this.

## 4.1 Our topography

• *Statistical data*

Total geographical land area = 32.87 lac km<sup>2</sup>

Less,

Under Pakistan (PoK) = 0.78 lac km<sup>2</sup>

Under China = 0.38 lac km<sup>2</sup>

Land gifted by Pakistan to China = 0.05 lac km<sup>2</sup>

Total area under Pakistan and China = 1.21\* lac km<sup>2</sup>

[\* Source : *Statistical Abstracts of India*, 1999]

∴ Usable land area = 31.66 lac km<sup>2</sup> (details available for 30.49 lac km<sup>2</sup> (up to 1998)).

N-S length = 3,214 km

E-W length = 2,933 km

Land frontier = 15,200 km

Coastline [including Andaman, = 7,516.5 km<sup>a</sup>

Nicobar & Lakshadweep islands]

1999

2001

- *Forests* = 6.89 lac km<sup>2</sup> = 6.755<sup>b</sup> lac km<sup>2</sup>  
(21.76% of usable (21.33% of usable  
land area), of this land area), of this

Dense forests = only 3.67 lac km<sup>2</sup> = 4.17 lac km<sup>2</sup>

(having crown density > 40%)	(11.6% of usable land area)	(13.17% of usable land area)
Revenue receipt (1999-2000) <sup>d</sup>		= Rs 1770 cr
Expenditure (1999-2000)		= Rs 2480 cr
Deficit		= Rs 710 cr

[Source : *Forestry Statistics India (2001)*]

- It lies largely neglected and shall be developed for tourism, flora and fauna, marine businesses and exploration of hidden wealth.
  - Source : Statistical Abstract of India, 2003, showing denuding of forests at a fast pace, 13,500 km<sup>2</sup> (1.96% of forest area) in just two years.
  - Indicating that forests are getting denuded at an alarming rate because of indiscriminate felling of trees and over-urbanisation.
  - The revenue shown is too meagre and more than that is required for its upkeep and maintenance. It speaks volumes of a grossly mismanaged and highly kleptocratic and dilapidating scenario of our forests. Forestry is a large revenue source besides employment to many — calls for enormous development and care.
- We have large areas of green and arable land which are shrinking rapidly because of over urbanisation (Table 11.3).
  - There are also large areas of fallow, unculturable and marshy lands (Table 11.3).
  - We have a number of free flowing rivers through the length and breadth of the country. Many of the major rivers originating from Himalayas and other mountain ranges, are snow-fed and rain-fed and flow continuously throughout the year. We have enough water resources, but as 70% of their discharge goes into sea, we starve for water. If *we* manage them well, we can control the menace of floods and droughts for all times and conserve enough water for human consumption and other needs round the year (Chapter 15).
  - Irrigation facilities are poor and reach out to hardly 40% of the total crop area. Our dependence is still on rains.
  - We have a number of hill areas with good climatic and scenic beauty in many parts of the country, but most of them are in shambles. They shall also be turned into lush and lively tourists' paradises.

## 4.2 Our demography

Population in (2000)  $\cong$  100 cr officially. In 2006 we have considered it at 115 cr). This we have arrived at assuming the birth rate until now as 3% and death rate as 0.75% and using geometric progression on the rate of rise of population. Therefore population by 2006 =  $100 \times 1.0225^6 \cong 115$  cr.

Birth Rate	≅ 2.5%	} (Source: <i>Statistical Outline of India</i> , 2004-05). Small variation may appear in data compiled by different agencies.
Death Rate	≅ 0.8%	
Net rise per year	≅ 1.7%	
No. of villages	≅ 5.85 lacs	
Towns/Cities	≅ 3,500	
Rural Population	≅ 73%	
Urban Population	≅ 27%* [9% urban, 18% rural migrants] (also see Tables 11.2a and b)	

\* Minimum 40% of it (i.e. 11% of total population) are *jhuggi* or footpath dwellers [as per *India 2002* (Ministry of Information and Broadcasting, Govt. of India) and *Statistical Outline of India*]. As per our inferences drawn from Table 5.5 it may be of the order of 45-50%, to be on the conservative side.

**Our manpower** : We have massive manpower that we have turned into liability rather than strength. Majority of them are illiterate, jobless and lack means of living. Ours is a very intelligent race irrespective of their caste, creed, religion or language. Even the rural youth are capable. Manpower is our most valuable primary resource and we shall make full use of it.

**Disability and destitution** : A large percentage of our masses are disabled and destitutes. It is not easy to determine accurately the level of disability in our country. Based on different literature available and data collected from different sources, a rough estimate of disability is computed in Table 4.1. **According to this data at least one third of our population is disabled or destitute. This is an enormous size and must be a major concern for any country. A country shall remain backward irrespective of its other achievements unless it is able to address this menace on a permanent basis and provide them a respectable place in the society.** It will call for

- Better economic conditions
- Education, health care, proper diet, nutrition and medical facilities.
- Curing those who are curable.
- And most importantly eliminate disability right at birth and during rearing of a child.
- Educating and training those who are physically capable of discharging some duties and absorb them in the mainstream for nation building.

Majority of disabled are extremely poor and lack means of living (most of them would be a part of 68% computed at items 1 and 2 in Table 5.5). They are taken care of by NGOs and government rehabilitation centres. NGOs are doing a commendable job but it is not enough until we

eradicate this evil from its root which the state alone can do. The rehabilitation of this section will be a major task and one of our priorities. See Section 12.2.

**Table 4.1**  
**Level of disability in our country**

Nature of Disability	Likely occurrence as % of population [year 2000]
1. Physical and sensory disabilities and orthopaedically handicapped i.e. deaf and dumb [of this hearing impairment is 0.6-1.0%]	1.1
2. Delayed development [mentally retarded and locomotive impairment — dwarf and insane] [2.5% mild/moderate 0.5% severally retarded]	3.0
3. Learning disability [mentally weak]	6-15 (min. 10%)
4. Visual impairment [blind and low vision]	4.0
5. Permanent disability - War victims - Accident victims - Natural Calamity victims	2.0
6. Other disabilities/impairment - Paralytic - - Polio - 0.65% - TB - 1.5% - AIDS - 0.4% - Leprosy - 0.05% - Cancer - 0.2% - Epilepsy -	≅ 3.0
7. Destitution - Begging - Widows - Old Age - Orphans - Homeless - Eunuchs	>*10.0
Total – more than 33.0%	

\* It is possible that many destitutes are disabled and accounted for above. Nevertheless the enormity of the situation is so frightening that a percent less or more will hardly matter. Moreover *we* have addressed the disability and destitution combined at only 30% wherever it is referred to in the book.

### 4.3 Our resources

The strategic location of our country with coastline on three sides and towering Himalayas on the fourth, rich art and cultural heritage, unexplored hidden natural resources and enormous manpower can make us an extremely strong, healthy and prosperous nation in the world. A thorough study of our resources indicates that we have :

#### (I) NON-RENEWABLE NATURAL RESOURCES

We have enormous riches of a variety of minerals, metals and petroleum but only a trickle of these reach us because of lack of technology and their unscrupulous handling.

Copper ore	Bauxite	some deposits of Gold
Chromite	Nickel	
Precious Stones	Manganese Ore	Molybdenum
Iron ore	Kyanite	Tin
Lead	Sillimanite	Tungsten
Zinc	Lime Stone	
Coal and Lignite	Rock Phosphate	
Petroleum		
Oil and Natural Gas		
Hydro-Carbon, reserves	2100 <sup>1</sup> cr tonnes	

535<sup>1</sup> cr tonnes oil and oil-equivalent gas - spread over 17.2 lac km<sup>2</sup> [13.4 lac km<sup>2</sup> on land + 3.8 lac km<sup>2</sup> off-shore up to 200 m water depth].

Life expectancy - 28<sup>1</sup> years for oil, 49<sup>1</sup> years for natural gas.

[<sup>1</sup> These figures may vary in view of new finds.]

Logically speaking natural resources coming from mother earth should not be non-renewable but their renewable cycle being as long as thousands to millions of years, they are essentially non-renewable. The reserves explored so far are limited and unless we consume them with utmost prudence and conservatism many of these may be exhausted within the next 25-50 years leaving tomorrow's generation starving for them (Coal may last longer (150-200 years) because of higher reserves (0.22 lac cr tonnes)). To use them indiscriminately will be unfair and against the natural affection of a prudent parent for his children. It is also incumbent on our part to work rigorously to discover new reserves as well as do extensive R&D to find out substitutes for the most scarce natural resources (Petroleum being most urgent).

## (II) PRIMARY RESOURCES

*Agri-based resources*

Of the listed agri-based items in Table 4.2, the following may have encouraging and growing global market:

Wheat and Rice

Cotton

Horticulture - Fruits, Vegetables, Flowers

Dairy Products - Meat, Pork and Poultry

Fisheries and Marine products

In terms of primary resources we are still amongst the richest. In terms of quantity of agriculture produces like wheat, rice, tobacco, coconut, tea, vegetables, green fruits, dry fruits etc., we are amongst the top producers in the world. Our livestock, fisheries, piggeries and poultries also fall within the first few in the whole world. In fact we are number one in livestock and dairy products. It is unfortunate that people remain deprived while all that a nation needs to be prosperous has been provided by nature. It is like water, water everywhere and not a drop to drink. Riches all around but people live in stark poverty and deprivation. Those who produce the primary resources, farm products, nurture livestock and sustain about 115 cr people of this land remain the poorest of all. It is truly said that **“ours is a rich country where poor people live.”**

By proper land and water management and scientific methods of cultivation discussed in Section 11.2 we shall raise the yield of this sector by at least 7-10 times in 5-7 years.

## (III) SECONDARY RESOURCES

Industrial sector with more than 118.59<sup>1</sup> lac small scale units (2004-05) and 1.285 lac large industries (2002-03<sup>2</sup>) besides lacs of *khadi* and village industries must be amongst the largest industrial sector in the world. Yet our industrial climate post-independence has been sick for most of small and many of medium and large scale industries. Post liberalisation (after 1991) the scenario, however, is gradually changing towards betterment in the face of government reforms and easing the noose on industries. But for initial setbacks and making up period of about 10-15 years, the industries have begun doing well. If our industries are run properly their turnover will become a multiple of what it is today (Section 21.2).

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1. Source : Govt. of India, *Economic survey*, 2005-06

2. Source : *Statistical Outline of India*, 2004-05

**Table 4.2**  
**Agri-based resources**

Commodity	Production	World Ranking	Commodity	Production	World Ranking
(a) Agriculture (1998-1999)					
Rice	860 lac tonnes	2 <sup>nd</sup>	Tea	8.7 lac tonnes	1 <sup>st</sup>
Wheat	708 lac tonnes	2 <sup>nd</sup>	Coffee	2.7 lac tonnes	
Coarse cereals	343 lac tonnes		Sugar	142 lac tonnes	2 <sup>nd</sup>
Pulses	155 lac tonnes		Tobacco	6.0 lac tonnes	3 <sup>rd</sup>
Total food grains	2066 lac tonnes		Spices	18% world share	1 <sup>st</sup>
(b) Horticulture					
Processed fruits & vegetables	9.8 lac tonnes	2 <sup>nd</sup>	Cashew-nuts	3.5 lac tonnes	1 <sup>st</sup>
Coconut	14,950 million nuts	1 <sup>st</sup>	[largest exporter meeting 40% world demand]		
(c) Dairy Products (1998-99)					
Milk	745 lac tonnes	2 <sup>nd</sup>	Beef (cattle)	13 lac tonnes	
Milk powder	2.25 lac tonnes		Buffalo (meat)	12.1 lac tonnes	
Butter & ghee	15 lac tonnes	1 <sup>st</sup>	Goat (meat)	6.8 lac tonnes	
Wool (Sheep)	0.461 lac tonnes		Piggery (pork)	4.4 lac tonnes	
Eggs	31.5 billion	5 <sup>th</sup>	Chicken (poultry)	6.0 lac tonnes	
Animal husbandry and dairy development			≅ 24% of agriculture output		
Live Stock					
Buffalo	57% of world population		Fisheries & Marine products	54.0 lac tonnes	
Cattle	15% of world population	1 <sup>st</sup>			

[Source: *India 2001* and *Statistical Outline of India (2001)*]

#### (IV) TERTIARY RESOURCES

We possess historical monuments that are extraordinarily rich in art and culture. Most of them are in shambles and are decaying for lack of care and maintenance. But their proper upkeep can turn them into marvellous pieces of tourist attractions to substantially add to the economy of the nation (see Chapter 19).

**Despite what nature has provided us and our primary, secondary and tertiary resources, the facet of our country is scarred with melancholy and woes as we have lacked professionalism and expertise to make use of them.**