

# A Study of Land Utilization in Different Areas of India

Dr. Sunita Kalra

Assistant Professor Department of Geography Indira Gandhi University, Meerpur, Rewari, Haryana, India

# ABSTRACT

As in all other countries, land in India is put to various uses. The utilization of land depends upon physical factors like topography, soil and climate as well as upon human factors such as the density of population, duration of occupation of the area, land tenure and technical levels of the people. There are spatial and temporal differences in land utilization due to the continued interplay of physical and human factors. India has total geographical area of about 328.73 million hectors but statistics pertaining to land utilization were available for about 306.05 million hectares in 1999-2000. Table 21.1 shows the trend in land utilization for about half a century between 1950-51 to 1999-2000.

Keywords : Land Use, Land Utilization, Topography, Climate, Human Factors, India

# I. INTRODUCTION

# Land Utilization According To Some Physical Factors

# 1. Net sown area:

Cropped area in the year under consideration is called net sown area. This area has a special significance in an agricultural country like India because agricultural production largely depends upon this type of land.

There is an urgent need to increase the net area sown for meeting the food and other requirements of rapidly increasing population in India; although there is not much scope for increasing area under this category due to natural limitations such as topography, soils, climate, etc.

However it is heartening to note that net area sown has increased from 118.7 million hectares in 1950-51 to 142.6 million hectares in 1998-99. Thus there had been an increase of about 20 per cent in net sown area in about half a century from 1950-51 to 1998-99.

The percentage of net area to total reporting area also increased from 42 in 1950-51 to 46 in 1999-2000 (Fig. 21.1). However, the net sown area declined slightly to

141.2 million hectares in 1999-2000. This is not a healthy trend and must be checked at all costs Net sown area accounts for about 46 per cent of the total reporting area of India against the world average of about 32 per cent.

This is much higher than 40 per cent in the USA 25 per cent in Russia 16 per cent in Brazil and only 6 per cent in Canada. But the per capita cultivated land has gone down drastically from 0.53 hectares in 1951 to 0.14 hectares in 1999-2000. This is a serious trend and can be checked only by population control.

Madhya Pradesh has the largest net sown area of 19.89 million hectares which is about 13.89 per cent of the total reporting net sown area of India. This is followed by Maharashtra (17 69 million hectares), Uttar Pradesh (17.58 million hectares), Rajasthan (15.51 million hectares), Andhra Pradesh (10.66 million hectares) and Karnataka (10.26 million hectares).

It may be noted that agricultural prosperity does not depend as much as on the total net sown area as it does on the percentage of net sown area to the total reporting area. There are large variations in the proportion of net sown area to total reporting area from one state to another Punjab and Haryana had some of the highest proportions of 84.2 and 80.7 per cent respectively while Arunachal Pradesh had 3 per cent only in 1999-2000.

Large parts of the Satluj, Ganga plains, Gujarat plains, Kathiawar plateau Maharashtra plateau and West Bengal basin have high proportion of cultivated area. This is largely due to gentle slope of the land, fertile alluvial and black soil, favourable climate, excellent irrigation facilities and high density of population. In contrast, mountainous and hilly areas in the Himalayan region and some of the drier tracts are not much suited to farming because of rugged topography, unfavourable climate and infertile soils.

#### 2. Area sown more than once:

As the name indicates, this area is used to grow more than one crop in a year. This accounts for over 34 3 per cent of the net sown area and 16.6 per cent of the total reporting area of the country. This type of area comprises of land with rich fertile soils and regular water supply. It is clear that the percentage of area sown more than once is rather low in India as a whole.

This is attenuated to infertile soils deficiency of moisture and insufficient use of manures and fertilizers. This type of land is of special significance. Since almost all the arable land has already been brought under plough, the only course left to increase the agricultural production is to increase the intensity of cropping which can be done by increasing the area sown more than once.

Large tracts of the Indo-Ganga plain in Punjab, Haryana, Uttar Pradesh and Bihar and in coastal regions have large percentage of area sown more than once.



FIG. 21.1. India : Land use 1950-51 and 1999-2000

#### 3. Forests:

Forest area has increased considerably from 40.45 million hectares in 1950-51 to 69.0 million hectares in 1999-2000 recording a 70 per cent increase in a span of half a century. However, 22.23 per cent of forest land to the total reporting area is not sufficient for a tropical country like India where about 33 per cent of the total land should be under forests.

This will require massive tree plantations and vigorous restrictions on the reckless felling of trees. According to the expert committee recommendations, much of the area reclaimed from the forest for agriculture should be retired from cultivation and brought back under forests to save the land from the adverse effects of deforestation.

#### 4. Land not available for cultivation:

This class consists of two types of land viz. (i) land put to non agricultural uses and (ii) barren and unculturable waste. The area put to non-agricultural uses includes land occupied by villages, towns, roads, railways or under water i.e. rivers, lakes, canals, tanks, ponds, etc.



FIG. 21.2. India : Land use

The barren land covers all barren and uncultivated lands in mountains and hill slopes, deserts and rocky areas. These areas cannot be brought under plough except at high input cost with possible low returns. The amount of this land has been variable right from 1950-51 to 1999-2000, the data for which are available.

Land not available for cultivation accounted for 13.8 per cent of the total reported area in 1999-2000. The largest amount of land in this category is in Andhra Pradesh followed by Rajasthan, Madhya Pradesh, Gujarat, Uttar Pradesh and Bihar.

#### 5. Permanent pastures and other grazing lands:

A total area of 11 million hectares is devoted to permanent pastures and other grazing lands. This amounts to about 4 per cent of the total reporting area of the country. Grazing takes place mostly in forests and other uncultivated land wherever pasturage is available.

The area presently under pastures and other grazing lands is not sufficient keeping in view the large population of livestock in the country. About onethird of the reporting area in Himachal Pradesh is under pastures. The proportion varies from 4 to 10 per cent in Madhya Pradesh, Karnataka, Gujarat, Rajasthan, Maharashtra and Orissa. It is less than 4 per cent in the remaining parts of the country.

#### 6. Land under miscellaneous tree crops and groves:

Land under miscellaneous tree crops and groves include all cultivable land which is not included under net area sown, but is put to some agricultural use. Land under casuarina trees, thatching grass, bamboo, bushes, other groves for fuel, etc. which are not included under orchard are classed under this category.

Land under this category declined sharply from 19.8 million hectares in 1950-51 to only 4.46 million hectares in 1960-61 and further to 4.29 million hectares in 1970-71. Thus the percentage of this land fell from 6.97 per cent in 1950-51 to a mere 1.49 per cent in 1960-61 and further to 1.41 per cent in 1970-71.

After that juncture the area under miscellaneous tree crops and groves has shown varying trends and stood at 3.62 million hectares or 1.2 per cent of the total reporting area in 1999-2000. Orissa has the largest area of 7.74 lakh hectares in this category followed by Uttar Pradesh (5.47 lakh hectares), Bihar (3.44 hectares), Karnataka (3-05 lakh hectares), Andhra Pradesh (2.43 lakh hectares), Assam (2.36 lakh hectares) and Tamil Nadu (2.43 lakh hectares).

## 7. Culturable waste:

The "wasteland survey and reclamation committee" defines "culturable waste" as the land available for cultivation but not used for cultivation for one reason or the other. This land was used in the past but has been abandoned for some reason. It is not being used at present due to such constraints as lack of water, salinity or alkalinity of soil, soil erosion, waterlogging, an unfavourable physiographic position, or human neglect.

Reh, bhur, usar, and khola tracts of Uttar Pradesh, Punjab and Haryana as well as in several other parts of the country were used for agriculture in the past but had to be abandoned due to some deficiencies in the soil resulting from faulty agricultural practices. The land under this category has declined considerably from about 22-9 million hectare in 1950-51 to 13.8 million hectare in 1999-2000.

This decline in the wasteland is due to some land reclamation schemes launched in India after Independence. About one-sixth of the total reporting area in Goa is termed as culturable waste. Rajasthan has 4.9 lakh hectare of cultivable waste land which is about 36.1 per cent of the total waste land of India.

The other states with considerable culturable waste land are Gujarat (13.6%), Madhya Pradesh (10.2%), Uttar Pradesh (6.93%) and Maharashtra (6.83%). The cultivable waste, if brought under cultivation can be an important factor in augmenting the country's agricultural production. However, in the interest of long term conservation and maintenance of ecobalance, this land should be put under afforestation and not under crop farming. National Remote Sensing Agency (NRSA), Hyderabad is making valuable contribution in mapping the wastelands in India through satellite imageries.

#### 8. Fallow lands:

This category includes all that land which was used for cultivation but is temporarily out of cultivation. Fallow land is of two type's viz., current fallow and fallow other than current fallow. Fallow of one year is called 'current fallow' while that of 2 to 5 years is classified as 'fallow other than current fallow'. Fallow land is left uncultivated from 1 to 5 years to help soil recoup its fertility in the natural way depending upon the nature of soil and the nature of fanning.

There have been Varying trends in the extent of current fallow but it has recorded an increase from 10.68 million hectares in 1950-51 to 14.79 million hectares in 1999-2000. But there had been a sharp decline in fallow lands other than current fallows from 17.4 million hectare in 1950-51 to 11.18 million hectare in 1960 61.



FIG. 21.3. India : Pattern of net sown area

Since then the trend has been variable and it was 10.1 million hectare in 1999-2000. The largest area of over

2.5 million hectare of 'fallow land other than current fallow' is in Rajasthan followed by 1.4 million hectares in Andhra Pradesh and over one million hectares in Maharashtra. The distribution of the current fallow on the other hand presents a slightly different picture.

# **II. CONCLUSION**

Andhra Pradesh with about 2.8 million hectares has the largest area as current fallow. This is followed by over 2.6 million hectares in Rajasthan, 1.8 million hectares in Bihar, 1.4 million hectares in Karnataka, 1.08 million hectares in Tamil Nadu and over one million hectares in Uttar Pradesh. There is need to reduce the extent and frequency of fallow land in order to increase agricultural production. This can be done by proper dose of fertilizers, providing irrigation facilities, crop rotation and combination and several other similar farm techniques.

## **III. REFERENCES**

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