

CHAPTER - VI

CONCLUSION

Chapter 1
TOPIC NO. 6

The Upper Krishna basin is a very progressive agricultural region of Maharashtra. The development of irrigation and application of new techniques brought overall prosperity to this region. Several Agro-based industries have come-up in this part. The growth of sugar industry has further elevated the per capita income of agricultural population in this area. It has brought a great change in the rural society of the region.

The agricultural infrastructure of Upper Krishna basin has stimulated the growth and development of agriculture. The pattern of agricultural land use is mainly influenced by physical conditions of the area and its level of socio-economic development. The region shows stark contrast in physical conditions. Hilly Western part with heavy rainfall is dominated by Rice, Ragi and Sava crops while Central and Eastern parts are dominated by Sugarcane, Jowar, Pulses, and Groundnut crops. Drought affected area of North-Eastern parts has a dominance of Jowar, Bajra and Pulses. However, the Central and Eastern regions are more developed as compared to other parts of the study area. The general land use pattern indicates very little change, only one change is significant in respect of area under forest. The higher percentage of forest land is found in Mahabaleshwar, Jaoli, Shahuwadi, Patan, Radhanagari, Bhudargad, Ajra and Chandgad talukas. Most of the Western hilly area has a dominance of forest land. High concentration of cultivable land is dominantly found in Satara and Kolhapur district. More percentage of fallow land is observed in Sangli district.

The changes in cropping pattern shows that the considerable change in the cropping pattern is observed in Karveer, Kagal, Hatkanangale, Miraj, Tasgaon, Walwa, Karad, Koregaon and Khanapur talukas. Most of the irrigated areas are dominated by Sugarcane cultivation. In few patches particularly in Miraj, Tasgaon, and Khanapur talukas, the development of grapes and other fruit crops is observed. The Upper Krishna basin as a whole, has more dominance of Jowar crop followed by rice, Bajra and pulses. However, the cropping pattern indicates considerable change since 1960. The development of irrigation, use of improved seeds and techniques have a great bearing on changing cropping pattern of the region. The cropping pattern of the hilly talukas shows little change for the last 30 years. More change is observed in the fertile, irrigated areas of Karad, Walwa, Hatkanangale, Shirol, Karveer, Khanapur, Tasgaon and Miraj talukas.

The agricultural efficiency in any area is influenced by the combination of various factors. Development of irrigation is an important factor in increasing agricultural efficiency of the area. The Central and Eastern parts of study area have developed in respect of irrigation during the last 30 years. Still there is a wide scope to further intensify the irrigation in several parts of the region. Potentially rich soils of semi-arid and sub-humid tracts of the area have given better response to development of irrigation.

A comparative analysis of crop combination regions of the area clearly show the superiority of Doi's method. This method

identifies seven zones. Maximum combination includes eight crops and in hilly areas rice is the dominant crop, while in dry north-eastern zone Jowar dominates. The Central part shows high dominance of Pulses and Sugarcane.

The analysis of intensity of cropping pattern indicates very deceptive picture because of the types of crops taken in the area. The areas where sugarcane cultivation dominates the intensity is low, while in dry and infertile areas the intensity of cropping is high.

The general observation of sequential change in the productivity of land in the study area from 1960 to 1980 clearly indicate that nearly 38.24 percent region has high productivity of land. 46.15 percent of the region is dominated by medium productivity and nearly 15.31 percent region is observed by low productivity in 1980. However, during 1960 only 23.07 percent region was dominated by high productivity and nearly 53.84 percent region was dominated by medium productivity. The low productivity was also dominantly only 23.07 percent area. This change in the productivity of land is the combined effect of several socio-economic factor and technical advances during last twenty years development of irrigation; growth of agro-based industries use of improved seeds and fertilizers and the impact of co-operative movement have changed considerably the out look of the people at the same time the awareness of the people has increased the productivity of land. The low and medium productivity is presently found in the hilly parts and in the drought affected area of the study region.

One may conclude that the prosperous region of Upper Krishna basin will further bring various changes in the cropping pattern, since the area is developing fast in respect of irrigation, transport and industries.

REFERENCES

- (1) Ali, M. (1978) : "Studies in Agricultural Geography", Rajesh Publications, New Delhi, pp. 1-6.
- (2) Bhatia, S.S. (1967) : "A New Measurement of Agricultural Efficiency in Uttar Pradesh", Economic Geography Vol.43, No.3, pp. 242-260.
- (3) Brady, N.C. (1974) : "The Nature and Properties of Soils" 8th Edition MacMillan Publishing Co.Inc. New York, pp.1-3.
- (4) Buck, J.L. (1937) : "Land Utilization in China", Reproduced by the Council of Economic and Cultural Affairs Inc., New York, 1956, pp.110-113.
- (5) Dhillon, S.S. & Devinder Sandhu (1979) : Irrigation Development in Punjab its Potential and Limitations (1951-52 to 1975-76), The Geographical Society of India, Calcutta, Vol.41, No.2, pp.51-55.
- (6) Cantor, L.M. (1967) : "A World Geography of Irrigation", Oliver and Bayd, Tweeddale Court, Edinburgh London, W.I. pp.117-120.
- (7) Clark, C. and Haswell, M. (1967) : The Economics of subsistence Agriculture, MacMillan, London, pp.66-73.
- (8) Coppok, J.T. (1964) : An Agricultural Atlas of England and Wales", Feber and Feber Ltd., London, pp.23-40.
- (9) Deshpande, C.D. (1971) : "Geography of Maharashtra", N.B.T., New Delhi, pp. 11-14.

- (10) Gazetters (1960) : Maharashtra State Gazetters Satara, Sangli, and Kolhapur District Vol. XXIV, Directorate of Government Printing, Stationery and Publications, Maharashtra State, 1961, pp.56.
- (11) Gregor, M.F. (1963) : "Regional Hierarchics in Faliornias Agricultural Production 1939-54" Annals of Association of American Geographers, pp.268-279.
- (12) ICAR (1980) : "Handbook of Agriculture facts And Figures for Farmers, Students and All Interested in Farming", ICAR, New Delhi, pp.55-62.
- (13) Jadhav, M.G. (1984) : "Sugarcane Cultivation - A Regional Survey", Himalaya Publishing House, Bombay44, pp. 31-32.
- (14) Kendall, M.G. (1939) : "The Geographical Distribution of Productivity in England", The Royal Statistical Society Ltd., 102, pp.21-48.
- (15) Lal, R. and Greenland, D.J. (1974) : "Soil Physical Properties and Crop production in the Tropics", John Wiley and Sans Toronto, pp. 1-3.
- (16) Mrs.Mitra, M. (1976) : "Agricultural Geography of the Chattisgarh Basin", Sahitya Ratnalaya, 37/50, Gilis Bazar, Kanpur,1. pp.110-121.
- (17) More, K.S. (1977) : "Landuse Efficiency in the Upper Krishna Basin - A Geographical Analysis", Unpublished Research Project, Shivaji University, Kolhapur. pp.4-6.
- (18) National Commission on Agriculture (1976) : Rainfall and Cropping Pattern Report of Maharashtra.

- (19) Reddy, K.V. and (1976) : "Agriculture Efficiency in
Reddy, K.S. Andhra Pradesh" The Deccan
Geographer, Vol.14, No.2,
pp.157-162.
- (20) Ramanainh, Y.V. (1984) : "Regionalisation of Agricultural
& Reddy N.B.K. Productivity in Andhra Pradesh",
Vol.6, No.1, pp.1-15.
- (21) Reddy, K.V. (1977) : "Agricultural Productivity in
Andhra Pradesh", A study in
Trends, Problems and Prospectus,
S.V.University Press, Tirupati,
pp.19-31.
- (22) Sapre, S.G. and (1964) : "Inter-District Variations in
Deshpande, C.D. Agricultural Efficiency in
Maharashtra State", Indian Journal
of Agricultural Economics,
Vol.19, No.1, pp.242-252.
- (23) Shafi, M. (1984) : "Agricultural productivity and
Regional Imbalance", A study of
Uttar Pradesh, Concept Publishing
Company, New Delhi, pp.146-147.
- (24) Shinde, S.D. (1980) : "Agriculture in An Underdeveloped
Region" - A Geographical Survey,
Himalayan Publishing House,
Bombay-4, pp.114-116.
- (25) Sinha, B.N. (1981) : "Agriculture Efficiency in India",
In perspectives in Agricultural
Geography, Vol.IV, by Mohammad, N.
(ed.) pp.183-209.
- (26) Sing, J. (1974) : "An Agricultural Atlas of India",
A Geographical Analysis, Visal
Publications, University Campus,
Kurukshetra (Haryana-India),
pp.40-49.

- (27) Sing J. and (1982) : Agricultural Geography,
Dhillon, S.S. Tota MCGARAW Hill, pp.224-230.
- (28) Socio-Economic Review : Directorate of Economics and
And District Statistical Statistics, Govt. of Maharashtra,
Abstract of Sangli, Bombay.
Satara and Kolhapur
District (1960 to 1980)