

Article: Agricultural Problems and Prospects of Yeola Taluka

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ABSTRACT:

In this paper an emphasis given on the agricultural problems and prospectus of Yeola taluka which is located in Nashik district of Maharashtra state. The rainfall in this taluka is under the influence of south-west monsoon. There are twelve drought prone zones in Maharashtra, where Yeola is in the rain shadow zone and also included in one of the drought prone area of Nashik district. There is uneven distribution of rainfall in this study area. Drought is the one of the prominent problem in study area. Topography, soil, and scarcity of water are the broad limits to the development of agriculture. The population of this region is mainly engaged in primary activity i.e. agriculture. The socio-economic status of this area is primly bound to agriculture.

KEYWORDS:

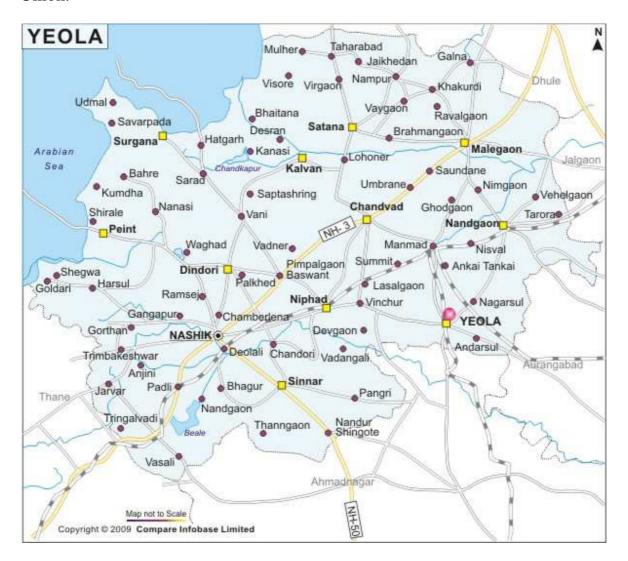
Agriculture, drought, climate, soils, land use, irrigation.

- · INTRODUCTION:
- Origin of the research problem: -

Yeola Taluka is the drought prone area of the Nashik District located at the South-Eastern part of District. It is one of the parts of Deccan plateau, Yeola Taluka occupied the total area of 1064.47 square Kilometer which is 6.85% of Nashik. According to the census of 2001 the population of Yeola taluka is 235521 while the rural population percentage is 81.65%. These populations are engaged in agriculture.

The density of population of Yeola is 221. This population is depending on directly or indirectly on agriculture. The topography of Yeola is uneven. The North-Eastern part is the hilly region of 'Satmala - Ajantha Mountain Ridge,' very few rivers are blowing from this area. The natures of these rivers are seasonal.

The average rainfall occurs Yeola only 45 to 52 cms. Yeola taluka is the rain shadow area of Maharashtra Only 5.57% land area under the forest, while cultivated area is near to 68%. The agriculture of taluka is highly depending of rain. So Kharif and Rabbi Theses are two hangams in this area. The eastern part of Taluka is famous for Cotton and Jawar while western part is famous for Bajra and Onion.



AIMS AND OBJECTIVES:

- 1. To study Geographical set up of the study area.
- 2. To study the impact of droughts on agricultural pattern of study area.

- 3. To suggest measures to minimize the adverse effects of drought on the production of crops and livestock and productivity of land, water and human resources.
- 4. Assessment of the impact of the change in cropping pattern on the socio-economic conditions of the rural community.
- 5. To study the agricultural problems and prospects of the study region

· HYPOTHESIS:

Topography, climate, soil, water and technological development play an important role in making the changes in the agriculture.

DATA AND METHODOLOGY:

The present study realizes upon primary and secondary data, concerning rainfall, land use and cropping pattern. The primary data collected from different sources for which special questionnaires were designed. Information was collected through various Talathi office, farmars and agricultural officers.

The secondary data obtained from official statistic such as socio-economic review and district statistical abstract of Nashik district, Rainfall data from District Collector office, Epitome of agriculture part-I, District- wise general statistical information of agriculture department (Part-III epitome of agriculture in Maharashtra) commissioner of agriculture Pune, Seasonal and crop reports, Statistical abstract of state. report on agriculture census Maharashtra State part-I and II Gazetteer of Nashik District. Data regarding population obtained from district census hand book of Nashik district. Data concerning surface water will obtain from irrigation department, commission report Vol. II and III. Data regarding ground water obtained from MERI, Nashik. Data regarding soil is obtained from district survey and soil testing laboratory, Data about climatic elements has been extracted from the publication of the meteorological department of Pune, Data regarding irrigation schemes will obtained Z.P. Office at Nashik and various irrigation departments of Maharashtra.

SCOPE AND LIMITATIONS:

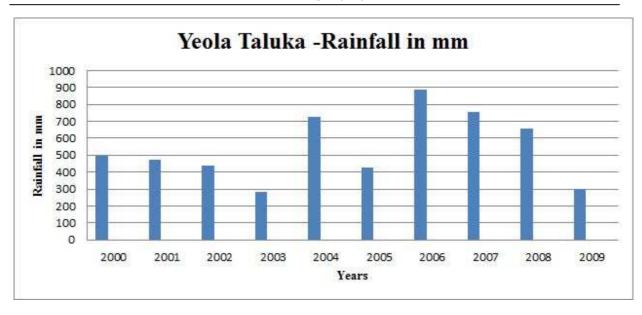
The agricultural problems of Yeola taluka would be the universal problems for the agricultural drought areas of Maharashtra. The total geographical area of the study area is 111581 hectares. From this only 78100 hectares area is useful to cultivation while only 4925 hectares of land is cultivated under irrigation for twelve months. *Kharip* crops are taken in 59500 hectares area and *rabbi*crops area is near to 23300 hectares. (Taluka agriculture office) In this investigation we find the low productivity of land, scarcity of water, traditional methods of farming, uneven climatic changes, economically backwardness of farmers, fragmentation of farm and enormous low market prices for agricultural products. These are the basic problems of this region. Low and uneven rainfalls as well as physical factors are the broad limit to the development of study area.

Table I: Fluctuation in rainfall from 2000 B.C. To 2009 B.C. (nashik.nic.in and Collector office Nashik)

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Rainfall (in	496.5	471	440.4	286	726	425	887	754	658	300
mm)										

(Calculated and Tabulated by author)

Above table shows that the rainfall in study area is sparsely distributed in 10 years reporting. In the year 2003 the rainfall is so low that it is only 286 mm only. The same situation found in 2009 that the rainfall only 300 mm. The average rainfall of the region is only 488mm.



PROBLEMS AND PROSPECTS:

The study region is presently faced with several problems of which being common to the rest of Maharashtra as well as the country. The problem may be considered in two broad groups. The first one is the physical difficulties arising from Yeola's peculiar natural environment setting and the second is the social problem stemming from the cultural background of the people.

In the study region out of total annual rainfall 80% rainfall receive from south-west monsoon. But the monsoon rains in the study region are often marked by some important variations from the normal, like climate uncertainly, uneven distribution often expressed in the commonly held view that 'agriculture' in India is a gamble against the monsoon is the most outstanding problem in this category. The monsoon rains through generally scanty in study region, show considerable variation in their time of annual amount and duration.

There has been lack of systematic long run planning of the needed production, processing and distribution of many of the agriculture commodities other than food grains, fruits and vegetable are receiving only little attention. The planning for agriculture development continues to be highly subsistence oriented with emphasis on producing for some minimum level of per capital food grain consumption (Abel, 1970).

Soil erosion is the removal of soil from its original location, specifically; soil erosion is a process of detachment and transportation of soil materials by erosion agents like water and wind. Study region has been settled and farmed for so long

that soil over has been subjected to modification. Deficiency of vegetable cover has agricultural implication. In many parts, the lack of forest cover has reduced the infiltration of moisture leading to increasing run-off to soil erosion.

Low level of literacy in the rural area also inhabit agricultural programme by rural area also agriculture programme by restricting the use of written material and necessity direct contact between the number of agriculture extension worker and famer living in remote and isolated rural area.

Other problem of a cultural nature are some religious beliefs, the ingrained conservation of majority of the peasant farmers the lack of capital, but these are sufficient to give some idea of the enormous task facing study region in its attempts to removes and reorganize its traditional bajara growing economy.

RECOMMENDATIONS:

In this way we can say that the majority people in the study region are mainly depended on agriculture. The economic development of the study area is mainly based on agriculture. The problem of agriculture land-use planning is envisaged in following aspects.

The proper planning of watershed management is needed to study area. Here is highly importance of water conservation. Number of methods should be apply for conservation of water such as well and tube well recharge, nala bunding, construction of dams, CCT's in hilly region, built check dams, Top to Bottom (Anna Hazare) etc.

There should be making more effective use of water resources in study region. Which involve bringing the benefits of irrigation to hundreds of small farms, improving the efficiency of water use through reduction of losses in storage and distribution system and drainage system to allow controlled water application which is so important in case of new varieties and also soil conservation crop management practices which enable more effective utilization of water in rain-fed area.

Applying new methods of irrigation is very useful for the better development of agriculture in study area i.e. sprinkler, perforated pipe, drip irrigation etc.

The soil of this area is so fertile but still it is needed to development of canal irrigation. There are a number of fallow lands in the study area, we can think of

this land seriously and can change it in to productive one limited land can be brought under agriculture with intensive effort. Increase in the gross cropped area can be achieved by a reduction of fallows cultivable waste and by increasing multiple cropping.

The study region is observed surplus of population in rural area many of the young male working people from this region prefer to work in agriculture, who along can take lead in the modernization of agriculture. The study areas topography and climatic condition have put limit on the source of income of farmer. The study area has to depend only one and rarely have two crops in a year. There is little possibilities of positive change in the status of farmers unless subsidiary supplement activity like milk, poultry etc. will be development through proper manner.

In addition to the development of water resources a large amount of rural infrastructure will have to be created to extent the geographic impact of agricultural modernization. Among other thing, this will include an adequate system of rural roads, development improved marketing and storage facilities for both inputs and agriculture products.

In this study area agro-based processing industries should be start on co-operative basis, these industries not only increase employment potential but also raise the socio-economic status of the study area.

Plant protection measure is implemented in the irrigated area little progress has been made in adopting improved agricultural implements, in the study area. Small and marginal farms should be provided modern agriculture implement on concession rate.

The most important thing is to increase the area of forest. There also be needed to start the planting of fruit vegetation in study area. The subsidies should be given to farmers for the innovative ideas in farming.

REFERANCES:-

Ø Agarawal B.(1983) Mechanisation in Indian Agriculture An analytical Study Based on Punjab

- Ø Agarawal B.(1983) Mechanisation in Indian Agriculture, Allied publishers, New Delhi.
- Ø Ali Mohammad (2001) Agricultural Land use and nutrition in Kheri, Sitapur and Barabanki Districts (U.P.), Ph.D. Thesis submitted to Aligarh University, Aligarh
- Ø Bhatai S.S. (1965) Patterns of Crop Concentration and Diversification in India, Economic Geography,
- Ø Coppock J.T. (1969) The geography of Agriculture Journal of Agricultural Economics *Vol.XIX*, *No.2*
- Ø **Deshpande** C.D.(1971) Geography of Maharashtra N.B.T. of India, New Delhi.
- Ø **Dhillon S.S, (1979)** Irrigation Development in Punjab its potential of Sandhu D limitations *Geographical Review of Indian Vol.41, No. 42*
- Ø Freeman T. W. (1968) Geography and Planning Hutchinson University Library, London. Ghosh B.N. 1985 Fundamental of Population Geography Mc Graw Hill New York.
 - Ø Gajhans D. S. (2007) Spatio-temporal Agricultural Land use in Latur District Thesis submitted to Dr. B.A.M.University, Aurangabad
 - Ø Hussain Majid (1969) The Geographical Basis of Tube well Irrigation in the upper Ganga-Yamuna Doab, *The Geographical Outlook, Vol- VI, Ranchi.*
 - Ø Rafiulah S. M. (1965) A New Approach of Functional Classification of Towns, Geographer, *Vol-XIV*
 - Ø Randhava M.S. (1980) Agriculture and Animal Husbandary in India I.C.A.R. New Delhi.
- Ø Sapre S.G. & Deshpande V.D.(1964) Inter-district Variation in Agricultural Efficiency in Maharashtra State ,*Indian Journal of Agricultural Economics*, 19 No1.
- Ø Saptarshi p. & Gulabrav P. (1993) Correlation between Sugarcane and other crop In Junnar Tahsil: A Micro Level Study, *Maharashtra Bhugolshastra Patrika Vol-VII o-2*, *Des. 1993*.
- Ø **Singh Jasbir** (1982) Determinants of Agricultural Productivity In Haryana-A Sample Study of Operational Holdings for Land use Planning, *Vishal Publication*, *Kurukshetra*.

Ø **Singh R.P.** (1992) Concept of Land use- Article in Land use and Agricultural Planning, *Editor- Noor Mohommad Vol-4 Concept Publishing Co. New Delhi*