

AGRO-INDUSTRIAL DEVELOPMENT OF TAPTI BASIN IN KHANDESH REGION

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Abstract—Agriculture in the most important occupation in the Tapi Valley in Maharashtra, the region known as Khandesh. Weather, Rainfall, and soil conditions exercise a great influence over the total area- cultivated as well as crop-sown. The seasonal distribution of rain-falls determines the crop-pattern and the duration of Kharif and Rabbi Seasons. Agriculture is the pre-dominant occupation and major economic activity of the people of Khandesh. The net sown area presents the actual geographical area under crops, orchards, and fodders. The percentage of the net cultivated area to total area in Jalgaon District is 72% and in Dhulia 56%. The Tapi River basin Stretches between two another large river basins namely, Narmada towards North and Godavari towards South. The Tapi constitutes almost a complete physical unit from the Burhanpur gap in the east to the Nawapur gap in the West. Regarded as a rift valley, it has a deep alluvial accumulation eroded by the main river and its tributaries. The result is badland topography of entrenched streams and ravines in an alluvial plain; characterized by level and isolated tops. This landscape is particularly dominant in the east where much of the agriculturally useful course is lost to erosion. Downstream, the cover is more extensive. But all over the basin the underground water level is dead and uncertain; hence cultivable land is mostly given to dry crops especially Jowar, Cotton, and Oilseeds. The recesses of the southern tributary valleys are more even and possess a deep black soil which promotes sound and extensive cotton cultivation. In fact, this is the core of the Khandesh Cotton Belt. Westwards, agricultural lands progressively shrink in area, and rice replaces Jowar and Oilseeds. Irrigation is highly possible. The eastern parts of the Tapi Valley are economically and socially more developed and advanced. The Chopada-Raver belt is a track of intensive production and skilled husbandry. The Mailer, Jalgaon tract is known for its cotton and oilseeds. Both these areas are well developed prosperous and progressives. The main food-crops of the Khandesh Region are Jowar, Bajara, Wheat, Black gram, Pigeon pea, and Green gram. As for non-food crops cotton is important among fibres, groundnuts, and caesium among oilseeds. Tobacco and Betel leaf among drugs, coriander, chilies, and garlic among condiments and spices. Cotton is the chief non-food production of the Tapi Valley. Banana is the net commercial crop which has been increasing in acreage year after year.

This paper is an effort to analyse the prospectus of the agriculture economics and agribusiness development of the district as the agro-industrial hub of the State.

Keywords: Agribusiness, Predominant, Rift-valley, Agro-hub.

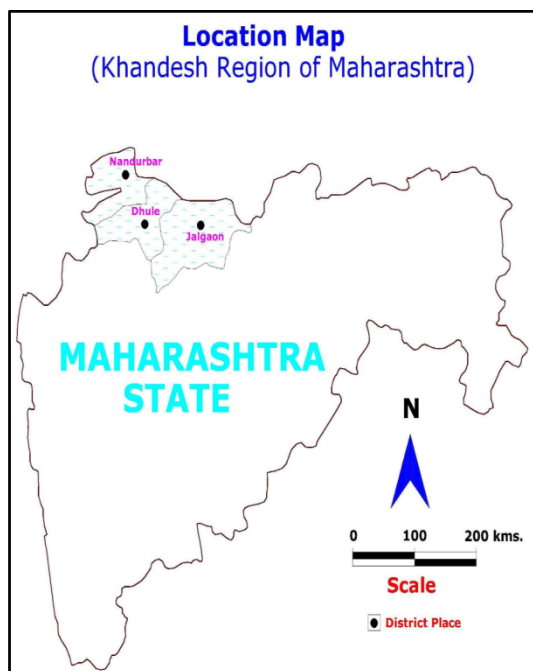
1. INTRODUCTION

A region, unlike a geographical area, has distinct rank in the regional hierarchy, providing antenatal functional unity and external relations. The concept of regional development or planning has been variously defined). "Regional development means the economic development of all the regions, raising their per-capita income, standard of living and fully exploiting their natural and human resources, "The concept of regional planning has assumed great significances in modern times. It attracted attention in the Industrial countries of the west, especially during the IInd World War, on account of the dangers faced by the great industrial centers. In the U.S.A. the question of regional planning was thoroughly examined by the National Resources Planning Board. The Tennessee Valley Authority (T.V.A.) Scheme reviewed as a model and the best example of the development of a backward region. This experiment was a complete success in the U.S.A. the distinguishing features of the T.V.A. Scheme was that it was an Autonomous River-Valley project independent of the uncontrolled national economy of U.S.A.

2. REGIONAL SETTING OF THE TAPTI RIVER VALLEY (KHANDESH REGION)

The Tapi River basin Stretches between two another large river basins namely, Narmada towards North and Godavari towards South. The Tapi constitutes almost a complete physical unit from the Burhanpur gap in the east to the Nawapur gap in the West. Regarded as a rift valley, it has a deep alluvial accumulation eroded by the main river and its tributaries. The result is badland topography of entrenched streams and ravines in an alluvial plain; characterized by level and isolated tops. This landscape is particularly dominant in the east where much of the agriculturally useful course is lost to erosion. Downstream, the cover is more extensive. But all over the basin the underground water level is dead and uncertain; hence cultivable land is mostly given to dry crops especially Jowar, Cotton, and Oilseeds. The recesses of the southern tributary valleys are more even and possess a deep black soil which promotes sound and extensive cotton

cultivation. In fact, this is the core of the Khandesh Cotton Belt. Westwards, agricultural lands progressively shrink in area, and rice replaces Jowar and Oilseeds. Irrigation is highly possible. The eastern parts of the Tapti Valley are economically and socially more developed and advanced. The Chopada-Raver belt is a track of intensive production and skilled husbandry. The Amalner, Jalgoan tract is known for its cotton and oilseeds. Both these areas are well developed prosperous and progressives. The map of Maharashtra below depicts the location of the study region.



Location Map

3. PRE-DOMINANCE OF AGRICULTURE

Agriculture is the most important occupation in the Tapti Valley. Weather, Rainfall, and soil conditions exercise a great influence over the total area cultivated as well as crop-sown. The seasonal distribution of rain-falls determines the crop-pattern and the duration of Kharif and Rabbi Seasons.

Agriculture is the pre-dominant occupation and major economic activity of the people of Khandesh. The net sown area presents the actual geographical area under crops, orchards, and fodders. The percentage of the net cultivated area to total area in Jalgoan District is 72% and in Dhule 56%.

4. CROP PATTERN

The main food-crops of the Khandesh Region are Jowar, Bajare, Wheat, Blackgram, Tur, Greenroom. As for non-food crops cotton is important among fibers, groundnuts, and cesium among oilseeds. Tobacco and Betel leaf among drugs,

coriander, chilies, and garlic among condiments and spices. Cotton is the chief non-food production of the Tapti Valley. Banana is the knelt commercial crop which has been increasing in acreage year after year. Out of total average of 90,000 hain the State, about 5000 ha, are in Jalgoan district. Most of Raver, Yawal, and Chopada taluka.

The double cropped area is more in the black soil talukas of Tapti Valley viz. Shahada, Shirpur, and Nandurbar, Sizable production occurred in Sakri, Dhule, and Sindkheda taluka of Dhule district.

To increase the Agricultural production, like improved seed; different types of fertilizers, are used. There are two types of fertilizers, as natural and artificial. Compost fertilizer human and animals waste products used by many farmers. Also some the artificial fertilizers such as Ammonium Sulphate, Super Phosphate, Green fertilizers, provided by the agricultural Departments.

5. PREDOMINANCE OF COMMERCIAL CROPS

Tapti valley is abrupt and is reached through a piedmont belt. It enters in Maharashtra near the Raver town, runs through the middle of the Jalgoan district and further enters in Dhule district. Emerge in the Arabian Sea. West of the Shahada in Nandurbar district at the outer edge of towns like Shahada, Chopada, Yawal, Faijpur, Raver, Bhusaval, and Shirpur.

The predominance of Commercial crops are over food crops is significant in the Southern part of the region, viz. Jamner, Bodwad, Edalabad. Cotton has significantly high production in Muktainagar, jammer Bhusaval, Bodwad and Nandurbar, Chopada, Shirpur, Sakri taluka. Oilseeds have high production in all taluka except Taloda, Akkranimahal, and Muktainagar. Groundnut has very high production in Parola, Chalisgaon, Shirpur, Nandurbar; Sea mum has significant production in Amalner, Chopada, Shirpur, and Dhule taluka. Raver, Yawal, Shirpur, Pachora, Jamner, taluka have significant production under plantains. Hectare under Wheat, Rice, Bajara, has been increased since 1976 because the framers have developed commercial, attitudes towards these crops, these crops consequent upon the rise in prices. Commercial crops, such as Cotton, Groundnut, Coriander, Banana, and Sugarcane require large investment in the form of fertilizers, insecticides, intensive cultivation. The table.1 below shows various banana species, their types and specifications cultivated in Khandesh Region of Tapti valley basin.

Table 1: Banana Spices

Sr. No	Type	Different Kind of Banana		
		Dwarf	Mousaferra	A
		Cauavandish	Dicica	Baco

1	General weight of Stem	17 - 20 kg.	60 - 65 kg.	32-35 kg.
2	General weight of Foliage	00.4 kg.	00.5 kg	00.7k g.
3	Percentage of fiber made of one Stem	1.25%	1.51%	4.09%
4	Percentage of fiber made of one Foliage	6.46%	6.50%	12.07 %
5	Length of the Fiber made of Stem	00.09 mt.	3.50%	02.5 mt.
6	Length of the Fiber made of Foliage	01.60 mt.	3.00%	03.00 mt.

Source: Maharashtra States Industrial Directorate.2013-14
 * Area under Banana Plantation in Maharashtra-95,000 Ha.
 Area under Banana Plantation in Jalgoan-5000 Ha.

6. COMMERCIAL CENTERS

Jalgoan, Amalner, Chopada, Shirpur, Dondaicha, Nandurbar, Dhule, are big commercial centers and there are many big commercial concerns, dealing in food-grains, cotton, iron, and hard-ware takes place on large scale, the trading community is attracted towards manufacturing much headway will be made in field of industrial development. All types of commercial, financial and transport facilities are available in this basin of Tapti River Valley.

7. AGRO-INDUSTRIES

In this basin, in the districts of Jalgoan and Dhule, number of agro-industrial units is at Jalgoan, Pechora, Chalisgaon, Amalner, Chopada, Dhule, Sakri, Shahada, Shirpur, and Nandurbar. It is observed that most of these

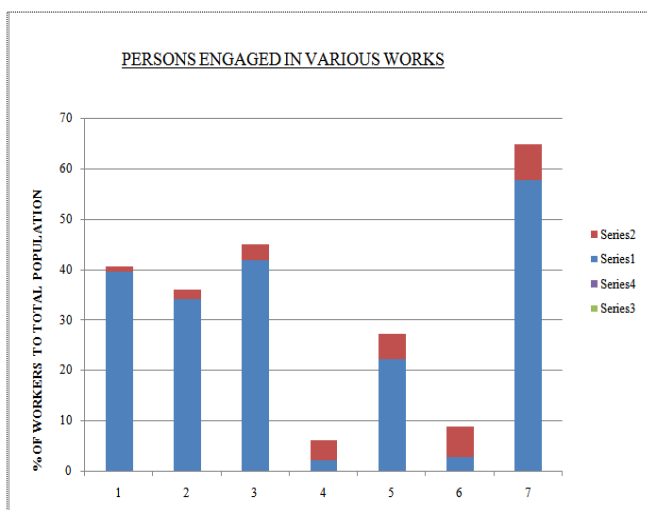


Fig. 1

Index: 1 = Total Workers.2 = Farmer.3 = Laborers.
 4 = Worker involve in the repairing of house hold population procedure & maintaining.

5 = other workers.6 = Workers who one getting not much work.7 = other persons except workers.

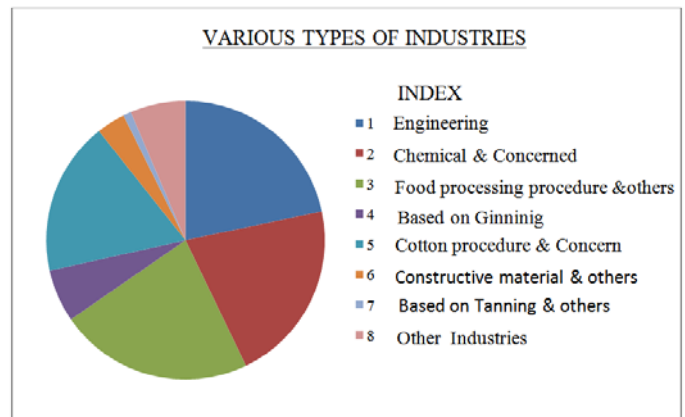


Fig. 2

Units are run by the industrialists, who come from outside of these districts. Some have come from Gujarat, Rajasthan and some from Madhya Pradesh. The profits which occur in these units may not be necessarily utilized for re-investment in these districts. Because these industrialists manage industrial units which are situated outside these districts.

There occurred a radical change of the beginning of the present century. Favorable factors like development of transport, and communication, availability of raw material. Cheap labour etc. in the Tapti Valley gave impetus to the development of industries like Cotton, Ginning, Pressing, Spinning, and waving, edible-oil-extraction, Sugar factories, Khandsaries, Paper Mills, Woolen Milles, Chilling Plants, Dal mills, Gud-manufacturing, Animal feed factories, Handlooms etc. for the different Agro-industries development the basin happened to be rich in agricultural resources such as groundnut, cotton, chilies, sugarcane, and banana, which have industrial use. Other commercial crops of industrial importance in the Tapti Valley are Jowar, rice, and wheat, groundnut is an essential raw material for preparing edible oils, salad, soap, medicine, perfumeries, lubricants, vanaspati manufacturing etc. Cotton and Sugarcane are two important crops. The above figure no.1 depicts various workers engaged, percentage to total population; while Fig. 2 indexed proportionate of various agro-industries in the region.

8. SMALL SCALE AGRO- INDUSTRIES

There are number of small scale Agro-Industries in the valley such as ginning and pressing factories, oil-mills, Bidi making factories. Woolen carpentry, handloom, Jiggery (Fig. 3) most of the workers are engaged in household industries. In Dhule district twenty seven oil mills 38 cotton ginning and pressing units. 65 units engaged in Gur-making. All these manufacturing industries employed about 25 thousand workers. In each tehsil Dairy and Milk scheme plan is developed and Chilling plants are in each tehsil.

In East Khandesh, (Jalgaon District) units for Ginning and Pressing were 208, Oil Mills 39, Gur Making 27, Dal Mills 16, Soap Factory 16, and Fertilizer Mixture 09. But now there is remarkable change in the development of Small-Scale AgLarge Scale Industries

In the Tapti Basin few remarkable large scale Agro-Based Industries re developing namely Cotton Textile Mills, and Sugar Mills Jalgaon, Amalner, Dhule, having textile mills and Raver, Yawal, Shahada and Sakri having sugar mills on the flanks of the Tapti Valley. In Dhule district Cotton textiles as well as Handlooms and Power-looms are developing fully. In spite of the favorable factors such as abundant raw cotton, cheap labor, finance and large domestic market, the Cotton Textile Industry remained confined to a single textile agro-Industries in the Khandesh Region.unit, new Pratap Spinning and Weaving Mill, in Dhule district and Pratap Mill and Khandesh Mill in Amalner and Jalgaon.

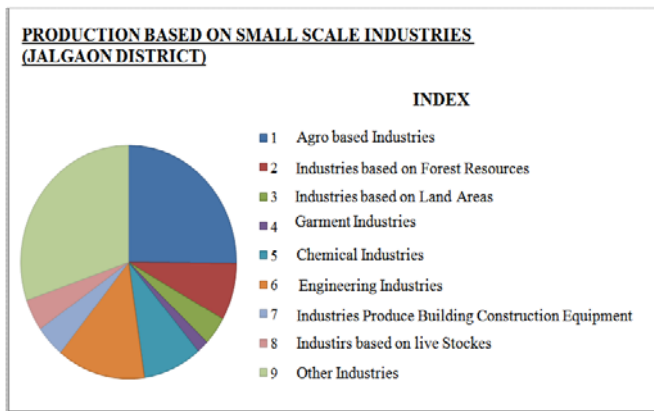


Fig. 3

The solvent-interaction Plant and Vanaspati unit established in Dhule in 1962. As a part of the intensifying cattle development programme, one cattle feed, manufacturing unit was established in the co-operative sector in 1971, by the Maharashtra state co-operative Marketing federation. A Large Scale starch factory was established at Dondaicha in 1973. In Jalgaon district there is one solvent extraction in Vanaspati units at Amalner. One Co-operative basis there a two Sugar Factories in Dhule district at Sakri, and Shahada and in Jalgaon district Faizpur, Kasoda. The Sugar Factories faced very grave situation arising of acute shortage of sugar cane, caused mainly on account of inadequate water supply owing to low rains and inadequate and irregular supply of electricity. Table 2 shows the resource-based industries in Khandesh.

Table 2: Industries based on available Resources

Sr. No.	Name of Crops	Area in Hector	Production in 000 M.T.
1	Food Grains (Jowar, Wheat, Rice, Bajara)	4,86,900	651 M.T.
2	Cereals (Tur, Mug, Udid)	1,79,300	78 M.T.

3	Oil Seeds (Groundnut, Saffola tin seed)	1,10,400	74 M.T.
4	Cotton	1,58,000	101 M.T.
5	Sugar cane	6,800	642 M.T.

Source: Maharashtra State Industrial Directorate, 2013-14.

9. CONCLUSION

Tapti basin being a Rift Valley, the surrounding area is made-up of thin clay, silt and fertile soil and continues rich in black regure soil as the climatic and physiographic conditions pervert. Hence agriculture is the predominant economic activity due to availability of all basic and sophisticated means. The region comprises Jalgaon, Dhulia and Nandurbar districts known as Khandesh Region of banana and cotton belt of the Maharashtra. Due to higher yield of cash crops and better transportation, education facilities, the basin is full-grown in agro-based industries, which promotes higher industrial growth and sophistication of all means. And hence agro economy is the rib of agribusiness of the region. Apart from, proposed Delhi-Mumbai-Aurangabad Industrial Corridor project of the Central Government which covers the western part of this valley basin certainly boost up the agro-industrial further development of this Tapti River basin of the State with pivotal role in Indian economy and increment of per capita income growth indulges agricultural sciences.

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