CHAPTER - 2
GEOGRAPHICAL FEATURES OF THE SOLAPUR DISTRICT

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Chapter 2

GEOGRAPHICAL FEATURES OF THE STUDY - REGION
(SOLAPUR DISTRICT)

2.0 Introduction

It is an essential step in the study of the primary agricultural co-operative credit societies to have clear and detailed picture of the local environment or the context in which primary agricultural co-operative credit societies are being the present study is working related to the Solapur district. So it becomes necessary to provide the geographical features of Solapur District giving its characteristics. Profile may be in the form of physical characteristics of the area, such as geographic, climate, soil, rainfall, temperature, hills, rivers, cropping pattern, natural resources etc. Social characteristic of farming communities such as population pattern, agriculture etc. Economic characteristics such as industries and co-operation, transport and communication, banks etc. and other relevant economic infrastructure available in the area. All these factors create a set of environment within which all activities of primary agricultural co-operative credit societies to be performed.

2.1 Geography

2.1.1 Location:

The district of Solapur lies entirely in the Bhima-Sina - Man basin, just before the Bhima river leaves Maharashtra state to enter into Karnataka state. Bounded by 17° 10' north and 18° 32' north latitudes and 74° 42' east and 76° 15'
east longitudes, the district is fairly well defined to its west as well as to the
east by the inward-looking scraps of Phaltan range and the Osmanabad Plateau respectively. The adjoining districts are Sangli to the South-West, Satara to the West, Pune to the North-West, Ahmadnagar to the North, and Osmanabad to the East and the Bijapur district in Karnataka state to the South. Though of an irregular shape the district is roughly squarish 200 k.m. East West and 150 k.m. North-South.

2.1.2 Boundaries:

The trijunction between Satara, Pune and Ahmadnagar district in the north-west of the district lies, just north of village Kurbari in the Malshiras taluka of Solapur district to its south along the river Nira down stream till the confluence with the main river Bhima near the village Sangam in the same taluka. From here the boundary runs north up stream of the Bhima river keeping Indapur taluka of Pune district to its east for distance of 80 km till reaching an island in the river just North-West of the village Jinti in Karnataka State. There after the boundary runs east-north-east keeping Ahamadnagar district to the north along the boundaries of Karmala taluka.

In this section, the boundary runs through a rolling country gradually rising in height of over 650 meters and then descending down to the valley of the Sina. After reaching the bed of Sina river north of Khadki village, the boundary follows downstream the Sina South-Eastward for a short distance of about 8 km till reaching the village of Vijapur. Thereafter the boundary turns
East and then turns sharply South along the crest of minor hill range once again to descent down to the bed of the Sina river just South-East of the village Dilmeshwar in Karmala taluka. Thereafter, the boundary runs in general South-Eastward following the Sina river downstream and keeping Osmanabad District to its except for some minor deviations till reaching the village of Ridhore about 14 km East of Kuruduwadi on the Kurduwadi-Barshi railway line.

Thereafter, the boundary runs next Eastward in general keeping Osmanabad District to its North and gradually gaining in elevation till reaching the sharp edge of Osmanabad Plateau. Following it for some distance South Eastward and then gaining to the crest of Plateau running over it for a short distance along the Barshi Latur rail-cum road to include 4 enclave villages of the former Nizam - State inclusive of the market cum railway town of Yedshi. The boundary turn back to the sharp edge and in general follows it along its foothills till reaching the village of Goudgaon. Thereafter, it deviates away from the scrap edge and runs in general Southwards and Eastwards through a featurets. Country of even slopes and cutting across accusional isolated hill masses till reaching the state boundary near the village of Khairal in Akkalkot Taluka. Thereafter, the boundary runs South to form the state limits till reaching past the railway town of Budhani and crossing the railway before turning West and falling to the bed level of Bhima river near the village Hill. Then the boundary follows the river upstream till reaching the village Talegaon Mandrup in South Solapur Taluka.
The boundary once again deviates from the river and runs through a rolling country. Keeping Bijapur and Sangli district to its south and jumping from the crest of one hill mass to another reaching the scrap distance in the south-western extremes of Sangola taluka. Thereafter the boundary runs north keeping in general to the lower scrap edge of the Phaltan range till reaching Khotale village in Malshiras taluka. Then the boundary runs north and runs cross country to descend down to the level of Nira river.

By and large the boundaries of the Solapur district in the west-north and the south follow natural features. It is also in the East foremost natural features. This seems to be result of the merger of part of territories of former princely states and exchange of enclave villages between Solapur and adjoining districts.

2.1.3 Area:

The district has a total area of 14844.6 sq.km. which is 4.82 percent of total area of Maharashtra state. Out of the total area of the district 2.28 percent (338.8 sq.km.) comes under urban area and 97.72 percent under rural area. Area wise, Karmala Taluka is bigger (1609.7 sq.km.) and Uttar Solapur is smaller (7663 sq.km.) taluka in the district.

2.2 District as an Administrative Unit

2.2.1 Administrative Evolution:

The area which was newly constructed Solapur District was originally a part of Ahmadnagar, Pune and Satara Districts. Karmala was in Ahmadnagar
district. Mohal in Pune district and Pandharpur, Malshiras and Sangola were in former princely state of Satara. Barshi and Solapur were frequently changed between the revenue districts of Ahmadnagar and Pune. The sub-collectorate of Solapur was within the jurisdiction of Ahmadnagar district in 1830 and a new district of Solapur was carved out in 1838 consisting of the sub-division of Solapur, Barshi, Mohal, Karmala and also Indi Hippargi and Muddebinal which are presently in Karnataka state. The district has however abolished in 1864 and again made sub-divisions of Solapur, Barshi, Mohal Madha, Karmala, Pandharpur and Sangola were grouped together to form Solapur district by the transfer from Satara district. Till 1941 there were no other changes in the limits of the district consequent to the merges of the formerly princely states of India.

Soon after independence, two villages of Jamkhandi, 21 villages of Jath, 13 villages and one town of Kurundwad, 13 villages of Miraj senior, 3 villages of Miraj junior, 28 villages and one town of Sangli and part of Akkalkot state were added to this district and three new talukas of Mohal, Akkalkot and Mangalwedha were carried out in 1949.

The Solapur District was split into two talukas - Solapur South and Solapur North in 1949. In 1950, 53 enclave villages were transferred from Nizam state of Hyderabad and were included within the district in exchange for 12 enclave villages belonging to this district transferred to Osmanabad and Gulbarga districts, the latter now being included in Karnataka state. At the same time, one village from Indi taluka of Bijapur district was added to Mangalwedha taluka of this district. With the recognition of states in 1956 the
Solapur district was included in the larger 12 percent lingal Bombay State and since May 1960 it forms part of the state of Maharashtra.

2.2.2 Administrative Details:

Solapur is a head quarter of the district, Solapur, Madha (Kurduwadi) and Pandharpur are three revenue divisions of the district. The administrative details of the district are presented in Table 2.1 alongwith the details of Maharashtra State.

Table No. 2.1

Administrative Details of Solapur District

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<th>Sr.No.</th>
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<th>Maharashtra State</th>
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<td>b</td>
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<td>10</td>
<td>Police Outposts</td>
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<td>1426</td>
</tr>
</tbody>
</table>

Source: District Collector Office, Solapur.

2.3 Topography

The district lies in the basins of the Nira, Bhima, Sina, and Man rivers most of the Malshiras taluka in the west drains northwards into Nira river in the west of the district. The drainage area of Bhima which winds South East through the district includes of the left bank Karmala, Madha, Pandharpur,
Mohal and South Solapur and on the right bank Malshiras, Sangola, Pandharpur and Mangalwedha. The Sina which flows roughly South East, Parallel to the Bhima drains eastern Karmala, Central Madha, Barshi eastern Mohal and Solapur North and South.

Near about Solapur, the country is about 550 meters above main sea level except north and eastern Barshi. Central Karmala, Central Madha, Parts of Malshiras and Southern Sangola which are hilly, Solapur District in relief, is flat/waving most of the surface comprises long, low an uplands separated by hollows/shallows basins with an occasional level. The Shallow-Soil covered uplands are suited for Pailures and deep soiled low land for cropping. In Karmala and Madha, the water shed between the Bhima and Sina is marked by a table land and dotting of individual residual knolls. Except this Solapur uplands are generally rounded swellings of traps overgrown with yellow sandy spread grass. The rest of the district is bare weak and treeless.

Except Barshi, Karmala, Mohal, Malshiras and Sangola the district of Solapur has few hills and even these are isolated, individual residual, resistant remanants. The Chief Knolls are vadshight in Barshi, Waghoba and Badaki in Karmala, Chinchgaon in Madha, Gurbad in Malshiras, Phaltan range in Malshiras and Khanapur Jath hills of Sangola.
2.4 Geology

The district as a whole is monotonously covered by Deccan Trap Basaltic lava flows, which in turn, are covered by a thin mantle of soil almost everywhere. These flows on account of differential weathering, give rise to undulating relief. There are no prominent hill ranges in the district and the region is characterized by typical Deccan Trap in Geomorphology. The fine grained dark grey basaltic flows constitute the high country while the weathered vesiculas and zeolitic basalts generally constitute the valleys in the area. The basalt of the district is just a Part of the vast expanse of the Deccan lava flows which occupy around 5,18,000 Sq.Kms. of the western and central parts of the country. The traps in the district probably represent middle traps in the three fold classification of traps (the lower and upper being the other two classes and attain a thickness of more than 1200 meters).

2.4.1 Soil and Kankar:

Almost everywhere in the district black cotton soil ranging in thickness from 0.3 meter to 2.5 meters is found to cover the top of different flows. This black cotton soil is the ultimate product of weathering of Deccan trap. Calcareous kankar and modules are commonly associated with these soils. The thickness of the soil cap along the river section increases to as much as 3 to 4 meters.
2.4. 2 Geological Structure:

The area is remarkable free from any structural complexity. There are no evidences of any structural disturbances like folding or faulting. The trap flows exhibit a general horizontal disposition though low dips are noticed here and there, which are exclusively local Phenomena. The fine-grained basalts show the typical hexagonal columnar type of jointing. The vesicular traps at places exhibit north-south and east-west striking joints, with vertical dips. Closely spaced sheet jointing gives the rock a sheared look.

2.4. 3 Economic Minerals:

No mineral of economic importance has been reported from the district. The hard and compact basalts, however, are locally used as building material and for road metal.

2.4. 4 Ground Water:

It has been observed that, in a trap covered country the vesicular traps are the Principal repositories of ground-water and when they occur below the water-table they serve as potential ground water reservoirs under both confined and unconfined conditions which observation has been further supported by the geo-physical investigations. Infiltration of rain water is the only means by which the annual recharging of the ground water body takes place. Hence, the ground water reserve in the district is not satisfactory. The chemical quality of ground water tapped from the vesicular zones is generally good and quite suitable for irrigation and domestic purposes. There is,
therefore adequate scope for effectively harnessing the groundwater in open wells by tapping for unconfined vesicular traps by fully penetrating them.

## 2.5 River System

The chief river of the district is the Bhima, its right bank feeders the Nira and the main and its left bank feeder the Sina. Besides a good number of lesser streams from the tributaries of the Bhima serve its local feeders. The Bhima and the Sina flow with a roughly south Easterly trend while the Nira runs east and the main north easterly. During the dry season all these rivers are fordable. Even the main river Bhima tinkles into a number of stagnant pools with water ankle-deep. However during the peak of south west monsoon not only the main streams but also the seasonal feeders streams are flooded, though for a short span of time they bring high volumes of coarse material inclusive of gavels and cobbles from the barren uplands and cover the shallow beds of the stream quite extensively.

### 2.5.1 Bhima River:

The Bhima River drains the central parts of the district comprises greater part of Karmala, Madha, Malshiras, Pandharpur, Mangalwedha, Mohal and Solapur talukas. The river, one of the main feeders of the Krishna river rises in 19x4 north latitude and 73x34 east longitude close to Bhima Shankar in Pune, Ahamadnagar, Solapur and Bijapur districts before falling into Krishna about 25 km. North of Raichur. It enters the district near the village Jinti in Karmala Taluka and flows in South-Easterly direction, to leave the district and enter into
Bijapur near the village Hilli in Akkalkot taluka. The river has an overall length of 289km. Within the limits of district. For winding length of 110 km. The river separates Karmala on the left from Indapur in Pune district on the right. For about 10 km. It separates Madha on the left from Malshiras on the right, for about 34 km. It separates Pandharpur on the left from Malshiras on the right. For about 65 km. It passes through Pandharpur and for about 65 km. It separates Solapur and Akkalkot the left from Bijapur on the right. The course of the river through the district is winding with general South-Easterly direction. Near the central of the Pandharpur taluka, it passes on the right of Pandharpur, on the holiest places in the Deccan.

Of its three major feeders within the district the Bhima receives Nira river from the right near the Sangam village in the Malshiras taluka in the west of the district, the Man river also from the right near Sarkoli, about 17 Km. South-east of Pandharpur in the South of the district and the Sina river from the left about 17 Km. South-West in South Solapur taluka along the Southern boundary of the district. The river flows between high alluvial and tilled banks 200-500 meters apart in certain places it is rocky but as a rule the bed is gravely or muddy. The river is crossed by nine ferries three in Pandharpur at Kuroli, Pandharpur and Brahmpuri and six in Solapur at Ghodeshwar, Kasur, Bhandarkawata, Sadepur, Aunj and Takli. The entire valley, 400-600 meters height above mean sea level, is dotted with isolated buttes scattered with fragmented quarts which are relics of intratrapean formations. The drainage pattern within the district is suggestive of a trellis pattern controlled by joints in
the traps. But the valley slopes are seamed with strenuous, detached low
alluvia cliffs about 3 meters high at various levels between 500 and 570 meters
representing perhaps the edges of river terraces of depositary formed over the
trap floor. The terraces of depositary formed over the trap floor. The terraces
on either bank of the meanders of the Bhima are particularly noteworthy in
sections upstream of Pandharpur but down stream of Tembhurni. They are
remarkably joined on either bank and are suggestive or rejuvenation of the
river valley. During the rains, flood water overflows the steep earthy banks.

2.5.2 Nira:

The Nira, the Chief right bank feeder of the Bhima river, rises in the Bhor
taluka of Pune district on one of the spurs of Sahyadri crowned by the Torna
fort, it runs South-east along the borders of the Pune, Satara and Solapur
districts before emptying its drainage into the Bhima river. Its total length of
about 180 Km, about 48 Km. lies on the borders of Pune and Solapur districts.
In this stretch the Nira runs north-east forming the northern boundary of
Malshiras taluka and skirting past the village of Akluj, it falls into the Bhima
River near Sangam. The banks of the Nira River are steep and rocky and its
bed is generally Iravelly. It is about 120 meters broad and has a few small
pools from which the water is drawn by lifts or budkis to water garden crops.

2.5.3 Man:

The Man, a right bank feeder of Bhima river in the Phaltan range a spur
of Mahadeo range in the Man sub-division of Satara district, west of Dahiwadi
and runs through eastern part of Satara district and winds through Sangola and Pandharpur taluka of Solapur before joining the Bhima near Sarkoli about 17 km. south-east of Pandharpur. Its total length exceeding 160km. about 80 km lie within the limits of the Solapur district. The river flows past the town of Sangola.

The banks of the Man River are low and cultivated while its bed is Iravelly. The river is notorious for quick rising during the floods. The main feeders of the Man during the district are Belvan, Khurdu, Songanaga and Vankadi all of which are seasonal.

2.5.4 Sina:

The Sina, one of the large left bank feeders of the Bhima rises 22km. west of Torna in Ahmadnagar district and runs south-east to Ahmadnagar and Solapur to fall into the Bhima near Kudual about 25 km. south of Solapur, on the Maharashtra-Mysore boundary. Of its entire lengths of 180 km. the river has 177 km. length within the district. About 7 km. north of the Mohol the river receives the Bhogavati river on its left bank. Another small tributary on the left bank is the Gorda nadi joining the Sina east of Madha. The Sina is about 100-200 meters broad and has steep banks. The bed is generally sandy but occasionally rocky. While upstream of Mohol the river flows through a narrow valley down stream it opens out widely to merge into the broad valley of Bhima. The Sina is crossed by five ferries, one in Madha at Kolgaon and four in Solapur at Lamboti Tirha, Vaddukbal and Vangi.
2.5.5 Bhogavati:

The Bhogavati is a large tributary of the Sina that rises in the south facing scarps of the Balgat range, in the north eastern parts of Barshi taluka and after a south-westerly course of about 65 km. through Barshi and Madha falls into the Sina, about 7 km. north of Mohol. It is about 30 meters broad and has a slender stream during a low water. Its main sources streams are the Bodki, the Nagasari and the Sina all of which rise in the Balghat hills and run south east. All these feeder streams keep the stream running practically throughout the year.

2.5.6 Bhend:

The Bhend is a small tributary of river Sina on its right bank and it rises near Kem in Karmala and falls into the Sina, a little north of the village Undergaon.

2.5.7 Borinadi:

The Borinadi, the minor left bank feeder of the Bhima rising on the south facing scrap-lands of the Osmanabad plateau near Tuljapur and flowing south drains southwards in the eastern part of Akkalkot taluka. The Harni is its tributary. It has a flow of 50 km. through the district.
2.6 Climate

2.6.1 Rainfall:

The average annual rainfall in the district is 584.3 mm (23.00"). The rainfall in the district varies from 448.8 mm (77.67") at Akluj near the western border to 689.2 mm (27.14") at Akkalkot near the south eastern border of the district. Some rainfall in the form of thunder showers occurs during the months of April and May. The rainfall during the south-west monsoon in the month of June to September amounts to about 74 per cent of the annual rainfall. September is the rainiest month. About 17 per cent of the normal annual rainfall in the district is received in the post-monsoon months of October and November. The variation in the annual rainfall amounting to 181 per cent of the normal occurred in 1916. The lowest annual rainfall, which was only 51 per cent of the normal occurred in 1905. In the same period, the annual rainfall in the district was less than 80 per cent of the normal in 10 years. Two and three consecutive years of such low rainfall occurred once each during this period. Considering the annual rainfall of the individual stations it is seen that two consecutive years of such low rainfall have occurred more than twice at most of the stations. In the period from 1911 to 1913 and in the case of two stations 1914 and also the rainfall was less than 80 per cent practically throughout the district. The annual rainfall in the district was between 500 and 800 mm.(19.69" and 31.50") in 31 years out of 50.

On an average, there are 37 rainy days i.e. days with rainfall of 2.5 mm. to 10 per cent or more in a year in the district. This number increases from 30
at Akluj, near the western border of the district to 45 at Akkalkot, near the South-eastern border.

The heaviest rainfall in 24 hours recorded at any station in the district was 251.5 mm. (19.90") at Pandharpur on Sept 7, 1985.

2.6.2  Temperature:

There are two meteorological observatories in the district one at Solapur and other at Jeur. The records of these two observatories may be taken as fairly representative on the meteorological conditions in the district in general.

The cold season starts by about the end of November when temperatures, especially night temperatures, begin to fall rapidly. December is the coldest month with the mean daily maximum at 29.39°C (84.70°F) and mean daily minimum at 14.8°C (58.6°F). The minimum temperature occasionally drop down to 4°C or 5°C (39.2°F or 41.0°F). The period from about the middle of February to the end of May is one of continuous increase of temperature. May is the hottest month with the mean daily maximum temperature at 39.9°C(103.8°F) and the mean daily minimum at 25.10°C(77.2°F). The heat during the summer season is intense and the maximum temperature may sometimes 90 up to about 40°C(111.2°F) or (113.0°F).
The highest maximum temperature recorded at Solapur was 45.6°F (114.1°F) on May 12, 1939 and the lowest minimum was 4.4°C (39.9°F) on January 7, 1945.

In 1991 the maximum temperature recorded is 41.0°C Celsius and minimum and minimum 15.3°C Celsius.

2.6.3 Humidity:

The air is highly humid during the South West monsoon months and mostly dry during the rest of the year. The driest part of the year is the summer season when the humidity is between about 20 and 25 per cent on the average in the afternoons.

2.6.4 Cloudness:

During the South West monsoon season, the skies are heavily clouded or overcast. Skies are generally clear or lightly clouded during the period of November to March. Cloudiness increases progressively from May and the afternoons are comparatively more clouded than the mornings.

2.6.5 Wind:

Winds are light to moderate in force with some strengthening during the period May to August. In the South West monsoon season winds are mainly from directions between South-West and North-West in the period October to December winds blow from directions between North-West and South-East in
the mornings and between North and East in the afternoons. In the next four months winds are variable in direction. In May winds are mostly from directions between West and North.

2.6.6. Special Weather Phenomena:

Thunder- storms occur during the period March to October. The highest incidence being in June and September. Dust- Storms occur occasionally during the hot season.

2.7 Population of the District

2.7.1 General:

As per 1981 population census report, the population of the Solapur district was 25,88,139 of which male population was 13,32,914 and female population was 12,55,225. Compared to 1971 population census report the per year rate of increase in population was 14.83 percent.

As per 1991 population census report, the population of the district is 32,24,034 of which male population is 16,64,927 and female population is 15,59,107. Compared to 1981 population census report the per year rate of increase in population is 24.57 per cent.

The per year rate of increase in population of Maharashtra state as a whole is 25.36 per cent which is more than the rate of Solapur district by 0.79 per cent per year.
2.7.2 Population Density:

The area of Solapur district is 4.82 per cent of the Maharashtra state, while the population of the district is 4.12 per cent of the state. As per 1991 population census report the population density of the district was 174 per sq.km, while as per 1991 population census report are 216 per sq.km., which is increased by 38 per sq.km.

2.7.3 Rural and Urban Population:

As per 1981 population census report, the rural population of the district was 70.35 per cent and urban 29.65 per cent of the total population.

Out of the urban population talukas of the district, highest urban populated taluka is Uttar Solapur while lowest urban populated taluka is Sangola. Malshiras, Daxin-Solapur and Mohol are wholly rural populated talukas. As per 1991 population census report, the rural population of the district is 71.19 percent (i.e. 22,95,135) and urban 28.81 per cent (i.e. 9,28,899). Thus Solapur district is dominated by rural population.

2.7.4 Male, Female Proportions:

As per 1981, population census report the male female population of the district was 1000 : 942. This was 1000 : 931 in urban area and 1000 : 946 in the rural area. At the same time, this proportion was 1000 : 937 of Maharashtra
state as a whole and 1000 : 850 in urban areas of Maharashtra state as a whole.

As per population census report of 1991, the male female proportion of the district is 1000 to 936 which is reduced by 06 as compare to 1981 census report.

Table No. 2.2

Different Variables of Population of Solapur District and Maharashtra State (1991)

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<td>1559</td>
<td>38112</td>
</tr>
<tr>
<td>6</td>
<td>Female Male Population (per '000 Males)</td>
<td>936</td>
<td>934</td>
</tr>
<tr>
<td>7</td>
<td>Density (per sq.km.)</td>
<td>216</td>
<td>251</td>
</tr>
<tr>
<td>8</td>
<td>Literacy Rate (per cent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8a</td>
<td>Total</td>
<td>47.06</td>
<td>64.90</td>
</tr>
<tr>
<td>8b</td>
<td>Male</td>
<td>58.71</td>
<td>76.56</td>
</tr>
<tr>
<td>8c</td>
<td>Female</td>
<td>34.63</td>
<td>52.32</td>
</tr>
</tbody>
</table>


2.8 Agriculture

2.8.1 Land Use Pattern:

On the basis of available data for the reference year 1995-96 out of the 14,87,843 hectares of land 2.14 per cent was under forest, 2.54 per cent was under grazing land, 4.25 per cent was non-cultivable and 15.52 per cent was
fallow land for the same reference year out of 13,17,300 hectares of cultivable land 91.80 per cent was under net cropped area. Out of total cropped area of 11,81,000 hectares 94.84 per cent was under net cropped area and 5.61 per cent was under double cropped area.

2.8.2. Land Holding Pattern:

In the year 1990-91 there were 3.92 lakh registered land holders having a total cultivated area of 12.89 lakh hectares on their names. Table No.2.3 shows the land holding pattern in the form of percentage of land.

Table 2.3

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Size of Land Holding</th>
<th>Percentage to Total Land Holders</th>
<th>Percentage to Total Cultivate Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Less than 2</td>
<td>39.70</td>
<td>11.44</td>
</tr>
<tr>
<td>2</td>
<td>2 to &lt;5</td>
<td>36.84</td>
<td>30.69</td>
</tr>
<tr>
<td>3</td>
<td>5 to &lt;10</td>
<td>16.68</td>
<td>30.55</td>
</tr>
<tr>
<td>4</td>
<td>10 to &lt;20</td>
<td>5.97</td>
<td>20.76</td>
</tr>
<tr>
<td>5</td>
<td>20 to &lt;50</td>
<td>0.78</td>
<td>5.28</td>
</tr>
<tr>
<td>6</td>
<td>&gt;=50</td>
<td>0.03</td>
<td>1.28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>


Analysis of Table No. 2.3 provides the important conclusions such as :-

1) Near about 40 per cent of land holders, having a land holding of less than 2 hectares hold only11 per cent of total cultivated land.

2) Near about 37 per cent of land holders having a land holding of 2 to less 5 hectares hold near about 31 per cent of cultivated land.
3) It means near about 77 per cent of total land holders have their land holding less than 5 hectares and their total area of land holding is more than 42 per cent of total cultivated area of the district.

4) Big land holders holding the area of 50 and more hectares are only 0.03 per cent of the total and they are holding only 1.28 per cent of cultivated land of the district. It means land holding pattern is dominated by small farmers having the area of 2 to less than 5 hectares, out of the total 3,40,063 hectares. Out of the total land holders 63.15 per cent are holding non-irrigated land. Only 9.42 per cent are holding irrigated land and remaining 27.43 per cent are holding irrigated as well as non-irrigated land.

2.8.3 Crop pattern:

Bajra and Tur are the main Kharif crops and Jowar is the main Rabbi crop of the district. In the year 1995-96 out of the total cropped area 61 per cent area was under Jowar, 50 per cent was under mustered and 3.37 per cent was under Bajra. Out of the 11.81 lakh hectares of cropped area 76 per cent was under cereals, 8 per cent was under pulses and 12 per cent was under oilseeds. The proportions of cereals and non-cereals were 87 per cent and 13 per cent respectively. Area covers by cash crops was 9 per cent of the total cropped area.

2.8.4 Warehousing and Marketing of Agriculture Produce:

There are 11 Taluka Agricultural Produce Sangh and one District Agricultural Produce market in the Solapur district. There are 46 Government owned warehouses having capacity of 54,000 m. tones.
2.9 Irrigation Development in the District

2.9.1 Irrigation Facilities:

In the year 1995-96 net irrigated area of the district was 2,10,873 hectares of which 73 per cent that is 155691 hectares was irrigated by wells and remaining 27 per cent that is 55182 hectares was irrigated by surface irrigation. In the Solapur district maximum area irrigated was in Pandharpur Taluka that is 18 per cent of total irrigated area and then Malshiras Taluka that is 17 per cent of total irrigated area.

Major Irrigation Projects

Bhima project is the only major project in the district. The construction of which has been completed in 1980. The work of canals, branches and distributaries are in progress. Revised command area of the project is 2,39,700 hectares including lift irrigation. In the year 1991-92 total irrigated area by this project was 58,506 hectares. At present Pandharpur, Madha, Mohol, Mangalwedha and Malshiras talukas are the beneficiaries of this project. Veer project of Pune district has it command area of Nira Right Bank Canal(N.R.B.C.) in Malshiras, Pandharpur and Sangola talukas. This project has its command area, in Solapur district of 1,89,786 hectares. In the year 1991-92 total irrigated area by this project was 90,431 hectares.

In the year 1998-99, 88990 hectares area was under the permanent irrigated and 88731 hectares was under seasonal irrigation in the Solapur district.
Medium Project

There are four medium irrigation projects in the district and one medium project of Satara district has its command area in the district. The total command area of these project is 52,266 hectares. In the year of 1991-92 total irrigated area by these project is 5341 hectares. In 1997-98 command area under this project was 189786 hectares.

Minor Project

There are 1861 minor projects in the district having its command area of 62,809 hectares. In the year 1991-92 total area irrigated by these types of projects was 14,070 hectares. In the year 1997-98 command area under this project was 40145 hectares.

2.10 Industry and Co-operation

2.10.1 Industries:

By the end of the year 1998-99 there were 4146 factories registered under Factories Act, of which 1036 (25 per cent) are closed and remaining 3110 (75 per cent) are working.

There are 12 sugar factories in the district of which 11 are from Co-operative sector and 1 from private sector. In the same year there are 413 weavers Co-operative societies in the district. At present there are 10 industrial estates in the district.
2.10.2 Co-operation:

General:

By the end of June 1999 there are 8121 Co-operative Societies of which 12.67 per cent are Credit Societies, 46.92 per cent are Produce Societies, 28 per cent are Social Services societies and 1.1 per cent are Marketing Societies. Out of the Credit Societies 49 per cent are Agricultural Credit Co-operative Societies. Out of Produce Societies 56 per cent are Milk Produce Co-operative Societies, 56 per cent are of Workers Contractors Co-operative Societies and 20 per cent are of others Co-operative societies.

2.11 Education

In the year 1998-99 there were 9.20 lakh student in the district of which 69 per cent were in primary school, 15 per cent in secondary school and 16 per cent were in different institutions of higher education. Out of the total students 55 per cent were boys and 45 per cent were girls.

In the year 1998-99 there were 2637 primary schools, 469 High schools, 114 Higher secondary schools and 49 colleges.

2.12 Communication

By the end of 1998-99, there were 531 post offices and 187 telegraphs offices in the district. 531 villages were covered by postal services.

2.13 Electricity

There is no power generation station in the district. By the end of 1992 electricity is provided to all cities and villages of the district.
Total consumption of electricity in the year 1998-99 was 491472 million kw/hr.

2.14 Other

By the end of 1999, there were 561 branches of scheduled and Co-operative banks in the district, of which 46 per cent were scheduled banks.

2.15 Conclusions

From the above profile of Solapur district one can conclude that,

1. Solapur district is predominantly rural district indicated by population census report 1991, the rural population of the district is 17.19 per cent (i.e. 22,95,135) and urban 28.81 per cent (i.e. 9,28,899).

2. The land under irrigation in the district is 21.60 per cent due to the fact that the Bhima river is the only major source of water supply and the Ujjani Project is the only major irrigation project in the district.

3. The agriculture in the district is predominantly rain-fed and that the average rainfall is 23", which is also insecure.

4. Owing to the inadequate and insecure rainfall, the ground water for well irrigation is inadequate.

5. The pattern of land holding in the district reflects the dominance of the small farmers.

6. There are no economic minerals in the district.
7. The whole district is monotonously covered by Deccan Trap having black cotton soil.

8. There is no secured ground water in the district, it mainly depends on degree of rainfall.

9. Bajra and Tur are the Kharif crops and Jowar is the main Rabbi crop of the district. Crop pattern of the district is dominated by food crops. Sugarcane is the cash crop undertaken in the irrigation track in the district.

10. Agriculture is the main occupation of the rural population of the district.

11. Electricity is supplied to all cities and villages of the district.

References:-

1. Gazetteer of India, Maharashtra State,
   Solapur District Gazetteer Department, Govt. of Maharashtra, Mumbai.

