

CHAPTER - I  
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INTRODUCTION TO THE STUDY AREA AND APPROACH TO  
PRESENT STUDY

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- Introduction
- Approach to present study
- Data base and methodology
- Identification of service centres

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The study area, Walwa taluka, is one of the economically and culturally developed talukas of Sangli district in Maharashtra State. It lies between 16°50' North to 17°10' North latitudes and 24°5' East to 24°27' East longitudes. It is bounded by Khanapur and Karad taluka in the north, Tasgaon taluka in the east along with river Krishna, Hatakangle taluka of Kolhapur district in the south and Shirala taluka in the west (Fig.1.1).

It extends over an area of 778 sq.kms. and had a population of 254,326 persons (131,444 male, 122,882 female), out of which 209,334 rural and 44,952 urban population as counted in 1971 census. But now it has 301,302 population, out of which 246,953 is rural and 54,349 urban population as counted in 1981 census. The study area includes 91 settlements, out of which 89 are villages and 2 are urban centres. It shares 9.08 percent area and 19.5 percent of the total population of Sangli district. The Walwa taluka is comprised of 8 blocks, which are administrative blocks; such as Rethare Haranax, Kasegaon, Peth, Kameri, Kurlap, Yelur, Bawachi and Walwa. The population density of taluka has not too much difference. Total density in taluka is 329 persons per square kilometer, urban density is 465 persons per square kilometers and rural density is 374 persons per square kilometer.

#### A HISTORICAL BACKGROUND

In 1948, Sangli district was not on the map of Maharashtra State. It was included in Satara district with its four talukas i.e. Tasgaon, Khanapur, Walwa and Shirala. In 1949, Satara district

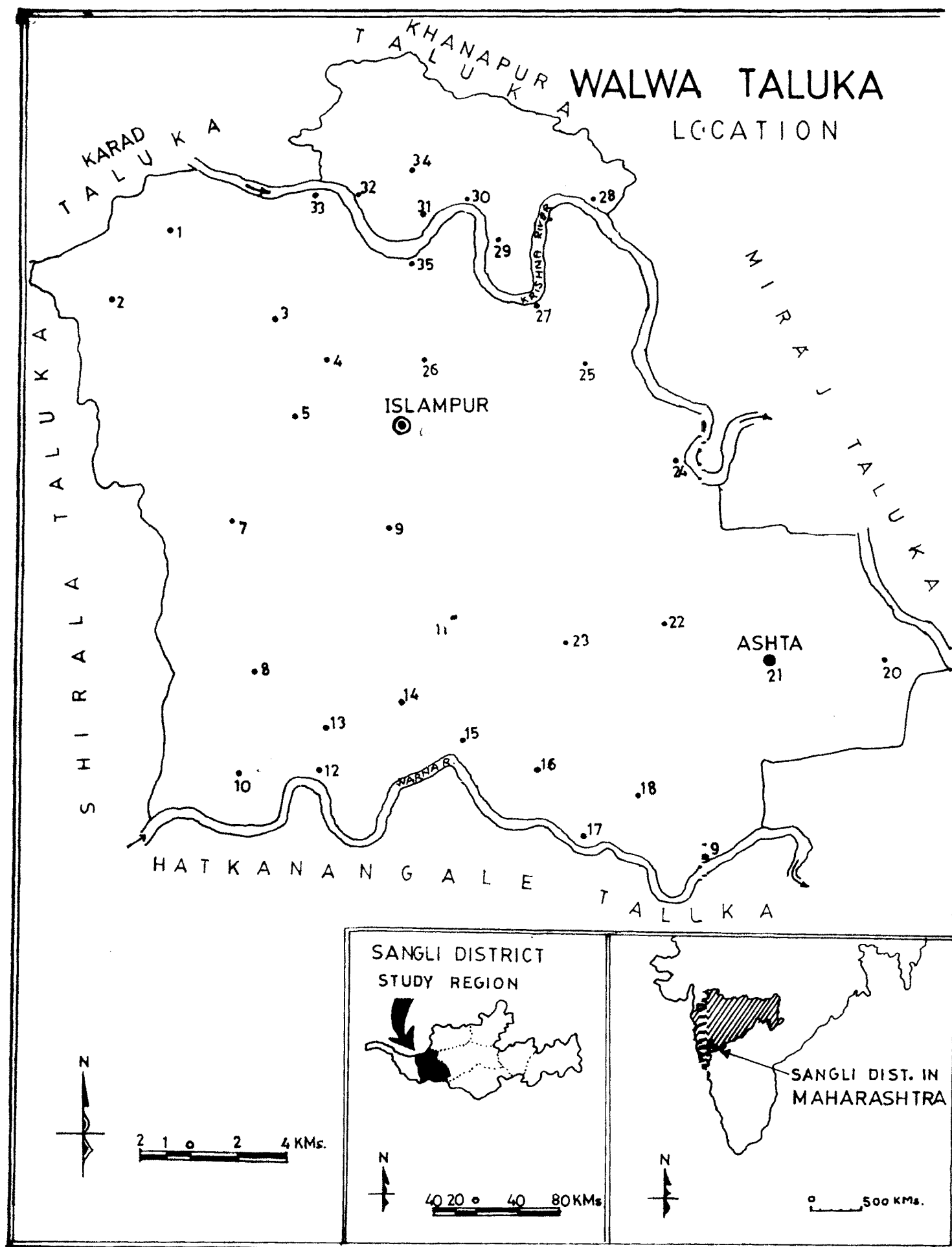


Fig 1.1

SERVICE CENTRES

<u>Code No.</u>	<u>Service Centre</u>	<u>Code No.</u>	<u>Service Centre</u>
1	Kasegaon	19	Shigaon
2	Wategaon	20	Karandwadi
3	Nerle	21	Ashta
4	Kapuskhed	22	Bawachi
5	Peth	23	Gotkhindi
6	Islampur	24	Walwa
7	Rethare Dharan	25	Nave Khed
8	Aitawade Br.	26	Sakharale
9	Kameri	27	Borgaon
10	Chikurde	28	Takari
11	Yede Nipani	29	Rethare Harnax
12	Aitawade Khurd	30	Bichud
13	Kurlap	31	Shirate
14	Yelur	32	Marshingpur
15	Tandulwadi	33	Tambeve
16	Bahadurwadi	34	Yede Machindra
17	Koregaon	35	Bahe
18	Bagani		

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was splited into two parts as North and South Satara when Satara district was splited into two parts, Miraj and Jath talukas were added in South Satara district. South Satara district was splited again in 1960, south part of Satara district was appeared in the map of Maharashtra State, as Sangli District. In 1964-65 Kawathe-Mahankal and Atpadi talukas were added in Sangli district.

### PHYSIOGRAPHY

The overall shape of the study area is irregular with Warna river in the south and Kamal Bhairav Dongar in the north. The lowest contour of the area is along with river Warna and the highest point of the area is located in north-west corner at Kille Machindragad (2595').

In general Walwa taluka is a part of the Deccan Plateau, which is a rocky and undulating in nature. Several dissected offsets are found in the central, northern and western boundary of taluka. Panhala Mahimgad range of the west and Kamal Bhairav range of the north, are branches of Sahyadri. The slope of the area is from north to south in north and from west to east in west and from centre to surrounding area in the centre. Central part is slopping to Krishna river in the north and Warna river in the south.

All the streams and stream segments are originated at the centre and flow towards river Krishna and river Warna. Both the Warna and Krishna rivers developed their meanders. Except

marginal hilly areas, there is a upland and plain area located in the Doab region of Wara and Krishna river (Fig.1.2). Eastern and Western part of the taluka is barren land with steep slope, hillocks and it causes to greater intensity of soil erosion.

Broadly the taluka may be divided into three physiographic units : 1) Western dry land 2) Northern hilly area and 3) Central upland and Marginal low land area.

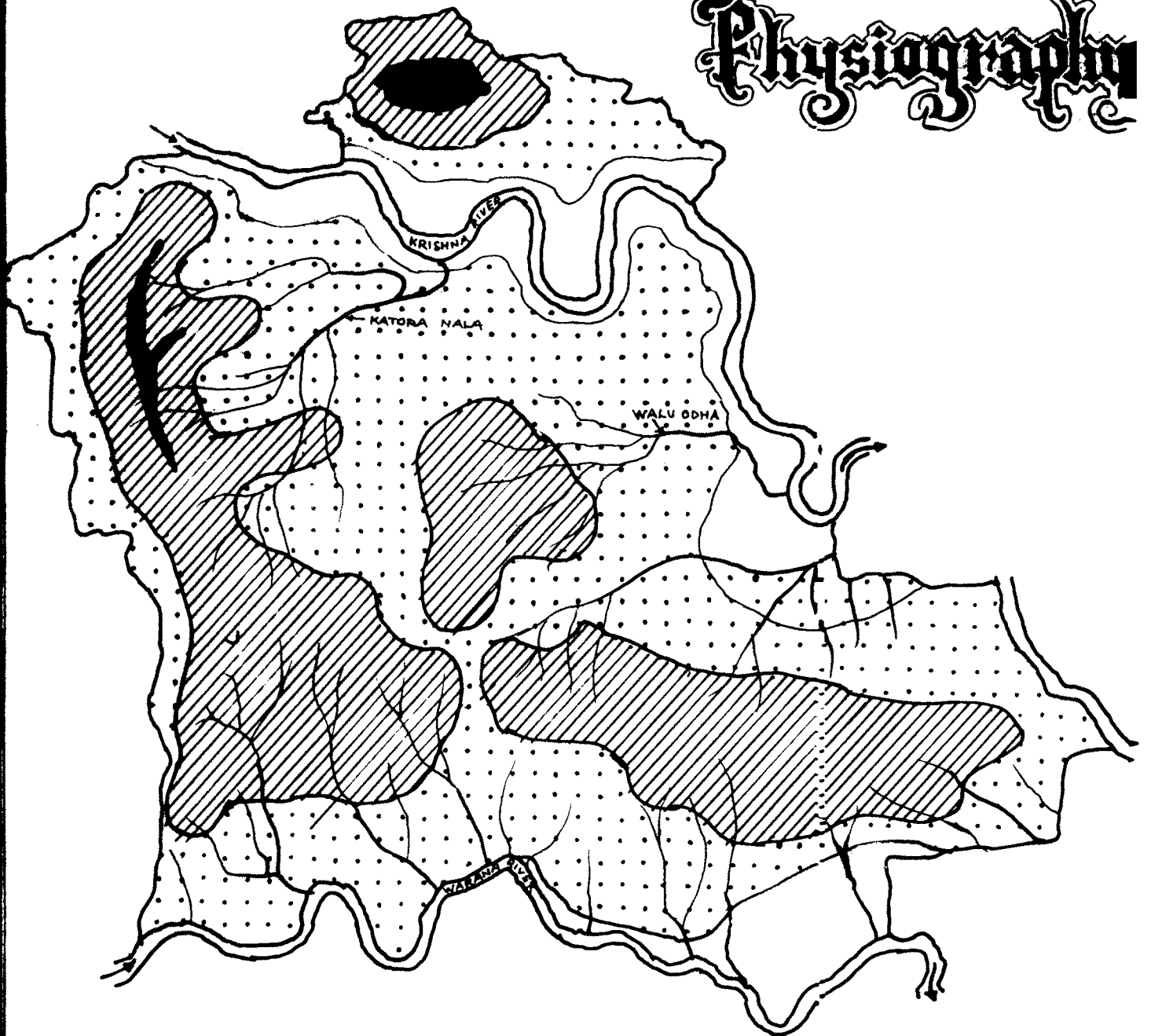
#### 1) WESTERN DRY LAND

The area from western boundary of taluka to Kameri, Yedenipani, Itakare, Vashi, Shivpuri, Peth, Ladegmon and Rethare Dharan is included in dry land area. There are several small hillocks. No any irrigation scheme is developed. Actually this is the most fertile area, producing high percentage of wheat, jowar, groundnut, chilly and sugarcane with well irrigation. Most of the area is utilised as pasture land for grazing. It has flat topped hill ranges with average height of 740 metres. The area of western boundary is merely covered by bushes and thorny shrubs.





#### 2) NORTHERN HILLY AREA

It lies in the periphery of Walwa taluka and Khanapur taluka. It has continuous spur of Sahyadri mountain locally known as Kamal Bhairav Dongar. It passes through Kille-Machindragad to north-east direction. The highest peak of this range is at Kille-Machindragad (2595'), Sagarashwar Sanctuary is developed in Khanapur taluka. As it is near to Krishna river, due to the

## WALWA TALUKA

*Physiography*

## INDEX

	ABOVE 750 METERS
	650 — 750 "
	550 — 650 "
	BELOW 550 "



2 1 0 2 4 KMs.

Fig 1-2

medium slope, the intensity of soil erosion is more. Most of the part is neglected from irrigation facilities. Agriculturally the area is secondary in importance and the dry farming is the mode of cultivation.

This is the higher area with compare to plain area of the taluka. Adjacent area of Kamal Bhairav Dongar has similar topography with flat topped hills with the height of 800 to 850 metres. Most of the soil is infertile and the area is lacking with irrigational facilities.

### 3) CENTRAL UPLAND AND MARGINAL LOW LAND AREA

The region includes the area which lies along with the river Krishna and river Warna. This is the plain area which is irrigated by left bank canal of Krishna river in the north and by right bank canal in the centre. In the same way south part is highly irrigated by river Warna.

Irrigation schemes of Krishna river covers an area of Walwa, Rethare Haranax, Bawachi & Kasegaon blocks, while schemes at Warna river covers an area of Kurlap and some part of Yelur block. The slope of the area is gentle with height about 460 to 500 metres. This is the most fertile, highly irrigated and agriculturally developed area. Due to the denudation and weathering processes the area is characterised with red soils which is predominantly along with river streams.



## GEOLOGY

Walwa taluka is a part of Indian peninsula, which is a stable shield composed of geological ancient rocks. The rocks of cuddapah and Dharwar system are found at the depth of 150 to 200 metres. The topography is covered with granite and sedimentary rocks. Sedimentary rocks consisted sandstones, shale along with river streams. The Deccan lava flows are found in the form of bedded sheets. Basalt is very common rock in Walwa taluka.

## DRAINAGE PATTERN

The Krishna is a main river in the north as well as river Warna drains a lot of the part of the taluka in the south. Except these, several streams and segments are traversing the area and suppose to function as subsidiary local drains in which Valu Odha, at Tunjarpur, Peth and Kasegaon Nala, Katara Nala at Yeolewadi are important (Fig.1.2). Unfortunately these streams are filled by sand and silt and become dry bed in off monsoon season.

Walwa taluka has lack of ponds and tanks. Only three tanks are found in the taluka at Yelur, Karve and Rethare Dharan. Rethare Dharan (dam) is built up by raising an earthen dam across the natural stream. Very few percolation tanks are able to store the water. Vashi and Kurlap percolation tanks are built up across the depression bounded by hillocks on both sides.

River Krishna, is a main water source of Walwa taluka

which is originated at Mahabaleshwar in Sahyadri and flows from west to east in Walwa taluka. Actually it enters in taluka near Kasegaon village and flows upto Shirgaon. The Krishna river course has developed meanders at Yeolewadi, Kharatwadi, Rethare Haranax. Total length of river Krishna in Walwa taluka is about 44.50 kilometers and it irrigates most of the area through the left and right bank canals. In Krishna river a deepest depression is formed at Tambave which is known as 'Tambave Deh', it remains with full of water throughout the year.

River Warna, originated in Shirala taluka and entered in Walwa taluka at Devwadi village and flows upto Shigaon, it has also developed meanders at Altwade Khurd, Kanegaon and Shigaon. Total length of Warna river within Walwa taluka is 37 kilometers. It drains most of the area of its left bank. This is the non-perennial river, so the irrigational use is comparatively less to that of Krishna river.

#### GROUND WATER

The ground water is saline and alkaline with appreciable Sodium Carbonate content. Watertable is uncountered at close depth of 10 to 20 feet from surface in the area of river Krishna and Warna. As well as in the area of developed irrigation facilities, and left bank canal of river Krishna. In the rainfed crops area, it is very deep (70 to 80 feet from surface) in the area of volcanic rocks; while in the some localities watertable is the

deepest (200 to 350 feet from surface) near of Urunwadi, Tujarpur, etc.

#### CLIMATE

Walwa taluka experiences monsoon climate. Evaporation exceeds the rainfall and taluka is frequently subject to drought conditions. The temperature rises up to 38°C in the month of May and decreases up to 13.3°C in the month of January. Monsoon rainfall starts in the month of June or July and ends in September. December to April is a dry season.

The range of annual rainfall during last 50 years, ranges between 639 mm. to 700 mm. Similarly the number of rainy days are varies from 35 to 48 days, and average number of rainy days are forty. Nearly 66 to 70 percent of annual rainfall received in five months i.e. June to October. The month of July alone receives almost 19.2 percent of actual rainfall. The area receives the post monsoon rainfall during the month of November to December, and covers average rainfall of 5.8 percent of the year. March to May period receives 9.3 percent of annual rainfall. During December and January average rainfall is 65 mm.

Average annual maximum temperature of Walwa taluka is about 38°C and average annual minimum temperature is 13.3°C. Annual range of temperature is about 24°C to 26°C. Local cyclonic winds are caused to thunderstorms and lightning in the period of February and March.

Relative humidity of taluka is about 70 to 90 percent in June to September and decreases upto 40 percent in the months of January and December.

### POPULATION

According to the 1971 census, the population of Walwa taluka was 2,54,326 persons with 1,31,444 male and 1,22,882 females. In the year 1981, it was about 3,01,302 persons, out of this 1,53,409 were males and 1,47,893 were females. The population density of taluka is 387 persons per square kilometer as against 180 persons per square kilometer of Sangli district. Out of the total population 2,46,953 persons are living in rural area (81.96 percent) and only 54,349 persons are living in urban area (18.04 percent). The density of population in rural area is 373 persons per square kilometer and urban density is 464 persons per square kilometer. Fig.1.3, indicates the density of population in the study area.

The sex ratio of the study area is not proportionate. It is 969 females to 1,000 males in rural area and 941 females in urban area. The blockwise density of Walwa taluka shows that Rethare Haranax has 392 persons, Kasegaon 399 persons, Peth 318 persons, Walwa 355 persons, Kameri 289 persons, Lawachi 599 persons, Kurlap 375 persons and Yelur 379 persons per square kilometer.

# WALAWA TALUKA

POPULATION DENSITY 1981

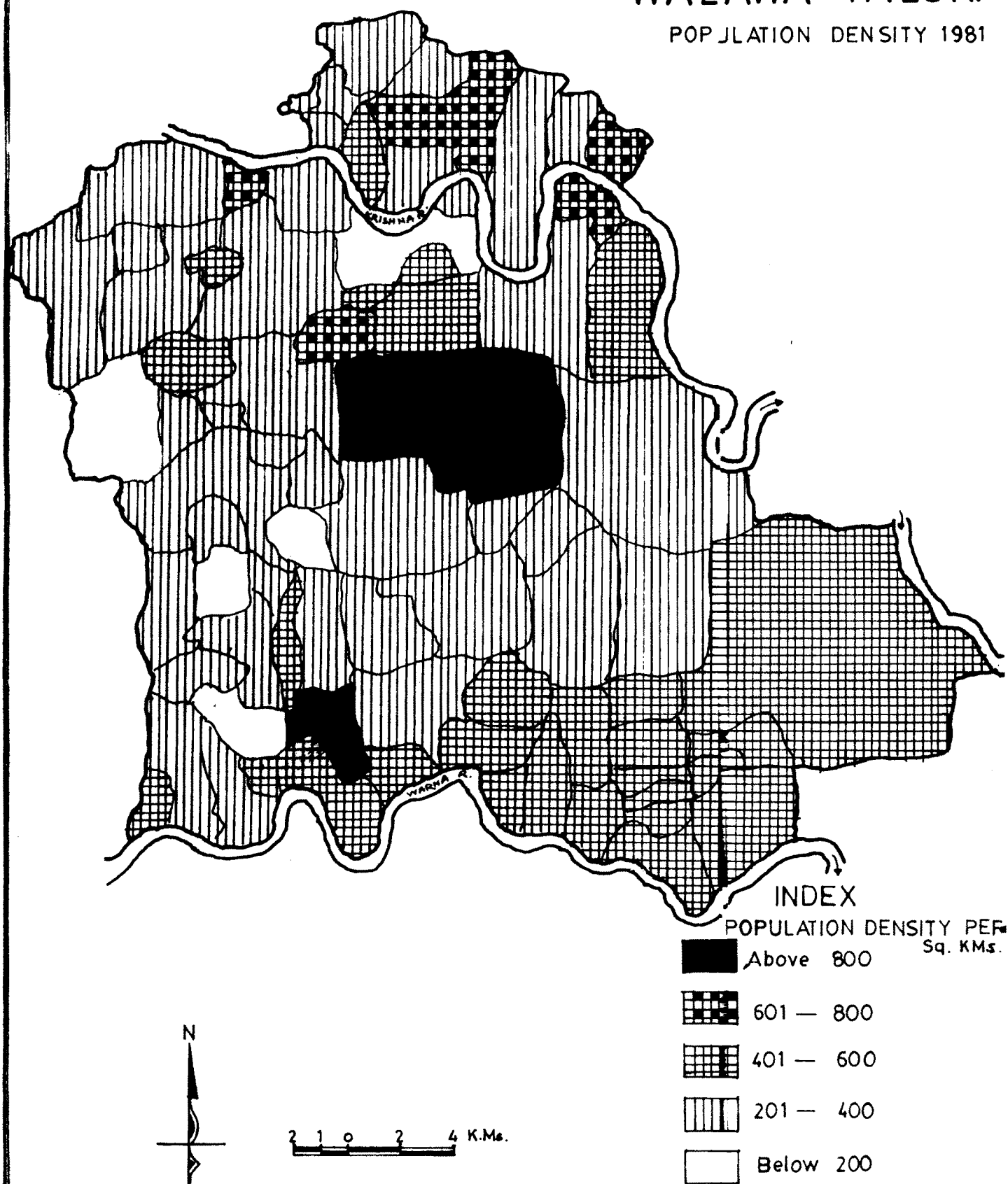


Fig. 1-3

### LITERACY

Out of the total population 1,46,394 (48.6 percent) persons are literate and the remaining 1,54,908 (51.4 percent) persons are illiterate. Male literacy is more than that of the female literacy. 52.8 percent male and 36.2 percent female population is literate in Walwa taluka according to 1981 census. Rate of literacy is less in the hilly and economically backward area.

The dependancy ratio for the area in 1981 is 68.21 percent (non workers) to 100 (workers).

### OCCUPATIONAL STRUCTURE

Occupational structure consists of three categories. Agricultural labours and agriculturist are included in primary activities, household industry workers are included in secondary activities and tertiary activities comprises other workers.

Out of the total population of study area, 82 percent population is rural and 18 percent is urban population. 92.02 percent population is engaged in agricultural activity, 1.07 percent population is engaged in secondary activities and 6.90 percent in tertiary activities. This indicates that agricultural activity is the dominant occupation in the area. Table 1.1 shows general landuse pattern of study area.

The study of landuse pattern of the area under study shows that out of the total geographical area, 82.25 percent

of the area is net sown area. Barren and culturable waste (6.35 percent) is followed by forest (3.82 percent) area and current fallow (3.43 percent) area. Only 0.5 percent area is under grazing and permanent pastures.

**TABLE 1.1 : Land utilisation in Walwa taluka - 1981.**

Sr. No.	Landuse Category	Land in hectare	Percentage
1	Forest	3,000	3.81
2	Barren & culturable waste	5,000	6.35
3	Land put to non agricultural use	2,100	2.66
4	Permanent pastures and other grazing land	400	0.50
5	Current fallow	2,700	3.43
6	Other fallow land		
7	Net sown area	64,700	82.25
<hr/>			
	Total	78,800	100.00

**SOURCE :** Socio-Economic Abstract of Sangli District, 1981.

#### **INDUSTRIAL PROFILE OF THE REGION**

Walwa taluka is agriculturally and economically developed but in respect of industrialisation it is not that much progressive. A sugar factory is established at Sakharale (Rajaramnagar) with

adequate supply of sugarcane. M.I.D.C. area of Islampur comprise a steel factory, a aluminium factory, a leather bag factory, etc. Besides these factories, there are various oil mills, saw mills, acetone project and distillery is attached at sugar factory.

Poultry farming and dairy industry is very common in every village. Co-operative societies are functioning to collect the milk. Chilling plants are located at Ashta, Karanjwade and Kasegaon which supplies the milk to Government Milk Dairy at Miraj Co-operative Societies, Government Schemes and nationalised banks play an important role in the development of dairy industry. Gur production, alcohol and fertilizer production factory, etc. are other industrial units in the study area.

#### ECONOMY OF THE STUDY AREA

The economy of the region is predominantly agrarian. There are various agro-based industries in Krishna and Warna basin. Transportation network of national highway, state highway, South central railway line and other district roads play an important role in the development of the region. Islampur and Ashta are the urban centres located in fertile and agriculturally prosperous area of Krishna basin. Various small scale and cottage industries are developed at Kasegaon, Islampur, Ashta, Walwa, Takari and Sakharale. Agricultural goods are traded in market centres viz. Islampur, Ashta, Takari, Nerla and Kasegaon, etc.



### IRRIGATION FACILITIES

The co-operative lift irrigation schemes, percolation tanks and canals irrigation are the noteworthy features of the irrigation facilities in the area. About 3,363 hectares area is irrigated by Zilla Parishad Irrigation Schemes, State Government Irrigation Schemes and Private Co-operative Irrigation Schemes. Out of the total 3,363 hectares area - 48 hectares area is irrigated by Zilla Parishad; 266 hectares irrigated by State Government and 3,049 hectares area is irrigated by Private Co-operative Lift Irrigation Schemes.

It is estimated that the irrigated area would be increased upto 9,775 hectares, after the completion of Chardoli Dam.

Irrigation has played an important role in changing the economy of Walwa taluka. The production of cash crops of sugarcane, groundnut, wheat, chilly, tobacco, etc. is the apparent result of the irrigation. It is used in kharif and rabi seasons, however, because of excessive water supply new problems are created in some parts of the study area. Kharlard (water salinity) is one of the important problems.

### SETTLEMENTS

The study area contains ninety one settlements, out of which 89 are villages and two are urban centres i.e. Islampur and Ashta. The settlements of Walwa taluka are classified on the population size base. Table 1.2 shows the groups of settlements and population distribution of Walwa taluka in 1981.

**TABLE 1.2 : The groups of settlements & population distribution of Walwa taluka in 1981.**

Population size	No. of Settlement	Total Population
Less than 999	23	16,521
1,000 to 1,999	25	37,712
2,000 to 2,999	12	28,815
3,000 to 3,999	6	21,219
4,000 to 4,999	7	30,743
5,000 to 5,999	8	44,332
6,000 to 6,999	3	23,150
7,000 to 7,999	2	12,262
8,000 to 9,999	2	19,297
10,000 to 14,999	1	12,902
<u>URBAN POPULATION</u>		
15,000 to 24,999	1	21,333
15,000 and above	1	33,016
<hr/>		
Total	91	3,01,302

A comparative study of settlements within the region indicates that, there are very large number of small size settlements (below 5,000 population), few medium size settlements (5000 to 10,000), and very few large size settlements. Out of the total,

# WALWA TALUKA SIZE OF SETTLEMENTS

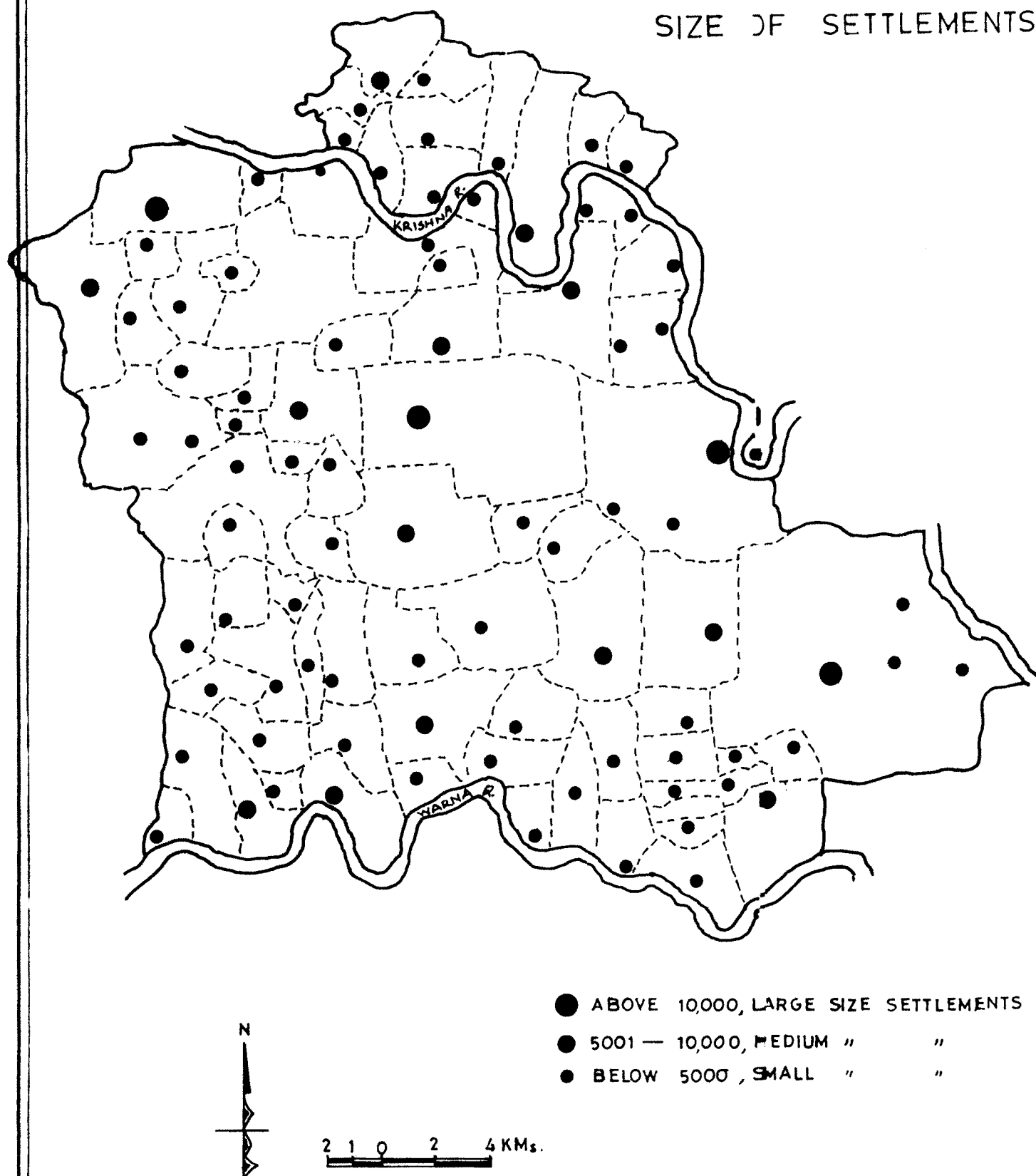


Fig 1-4

80 percent small size settlements accomodate 44 percent of the total population of the region. Medium size settlements accounts for 17 percent of the total and accomodate 32 percent of population share. It is very interesting to mention that large size settlements with only 3.30 percent of the total settlements, provides the home for 24 percent of total population of the study area (Fig.1.4).

#### TRANSPORTATION

The study area served by various means of transportation and communication. South Central Railway line passes through northern portion of taluka. It lies in between Bhavaninagar and Takari. It is a broadguage railway line. Takari is the most important and nearest railway station to taluka headquarter. The South Central railway line connects the places of Satara, Kolhapur and Belgaum district.

In addition to broadgauge railway line some important roads are acting as means of transportation. All the important centres within the taluka, are connected by mettaled and unmettaled roads to taluka and district headquarters. Poona-Bangalore road, National Highway No.4, lies in between Kasegaon and Kanegaon within the study region. The length of National Highway No.4 is 30 kilometers within the taluka. State highway No.51, Vita-Peth-Malakapur road, lies in between Peth and Krishnanagar and spread for 24 kilometers length (Fig.1.5). Road density is 0.157 kilometers/sq.km. The road transportation facilities are not equally

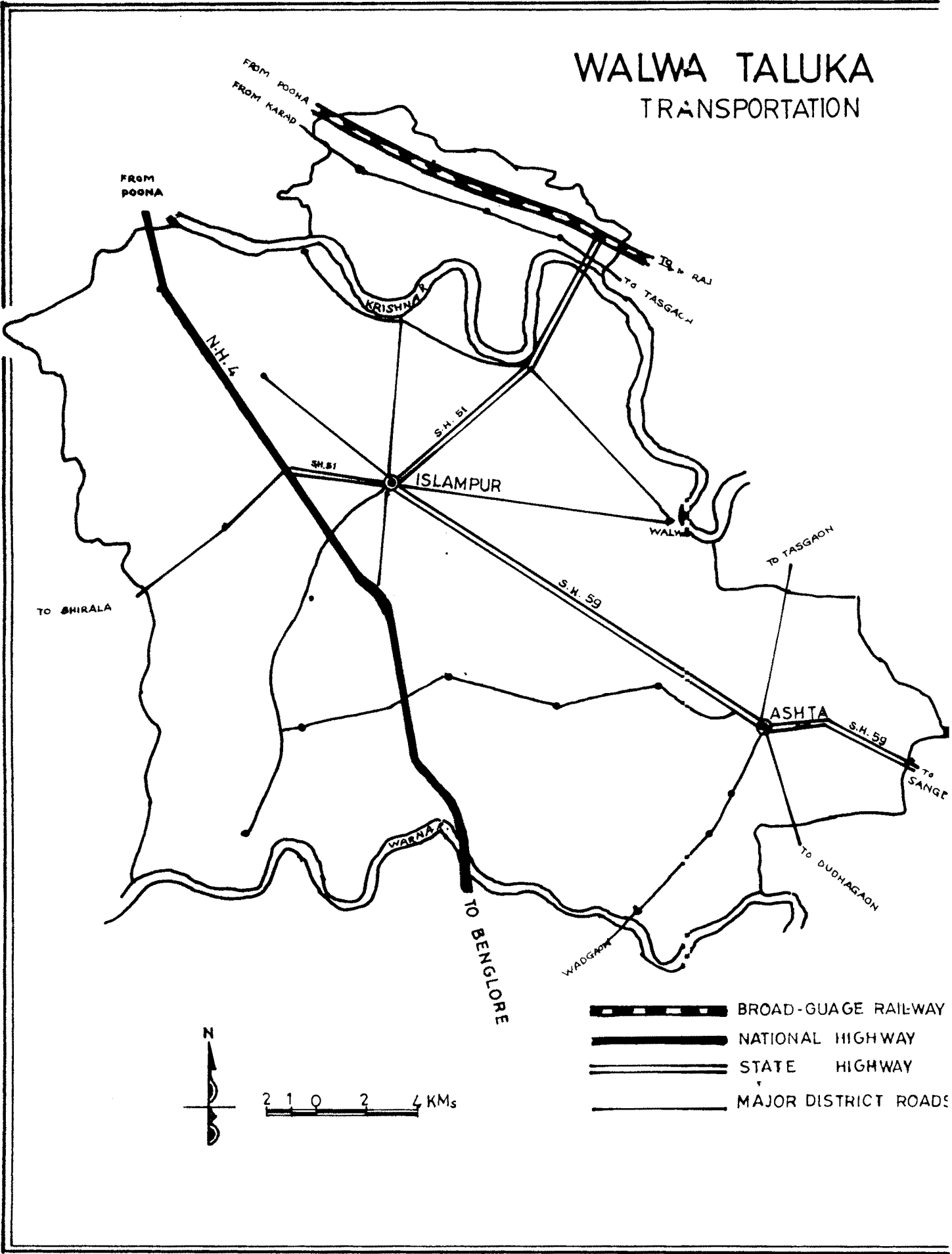


Fig 1.5

distributed in taluka. Islampur, Takari, Kasegaon, Peth, Ashta, Bhavaninagar, Walwa are the places having more connectivity to the central places of adjoining talukas. Northern and western portion have lower density of roads because of hilly terrain.

Besides 78 post offices, there are 601 telephone connections within the area which are the significant means of communication.

#### MARKETS FAIRS AND FESTIVALS

Out of the 91 settlements, Islampur and Ashta are the important urban centres. Islampur is a taluka headquarter, which has a daily vegetable market, regulated market for agriculture productions, market yard, etc., Ashta, Kasegaon and Takari centres have also a sub-market yards.

Weekly markets are existing in the 25 settlements of the taluka. They are offering goods and services to the surrounding area. The weekly markets are located at - Islampur, Ashta, Kasegaon, Walwa, Wategaon, Shene, Kameri, Aitwade Budruk, Aitwade Khurd, Yelur, Kurlap, Deorde, Chikurde, Gotkhindi, Bawachi, Tandulwadi, Bagani, Koregaon, Shigaon, Takari, Narsingpur, Bichud, Nerla, Borgaon and Peth (Fig.1.5). They provides various goods of agricultural products and other services.

Fairs and festivals are more popular in all over taluka, 42 fairs are organised in Walwa taluka at different localities.

# WALWA TALUKA WEEKLY MARKET CENTERS

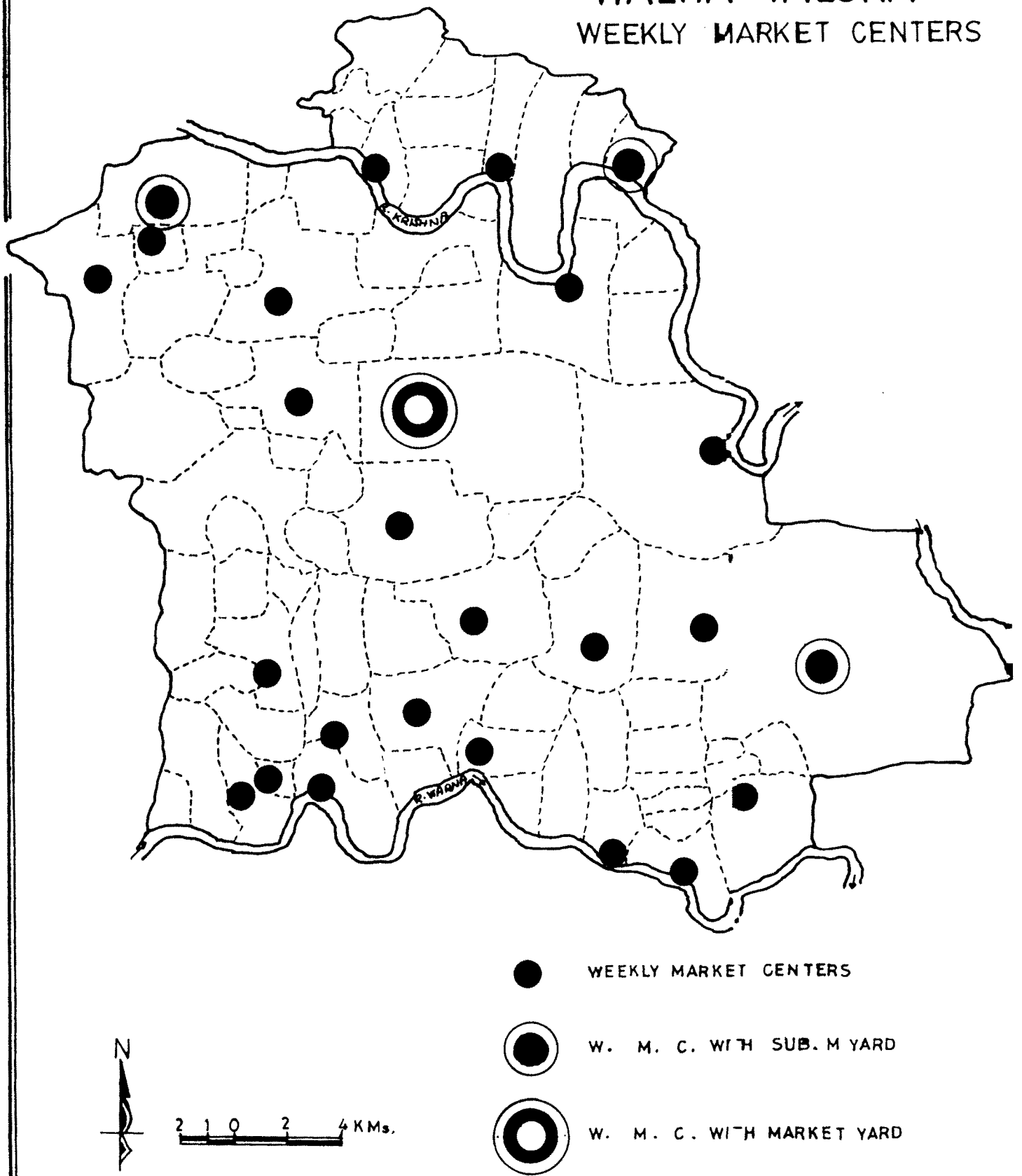


Fig 1-6

SETTLEMENTS AND THEIR CODE NUMBERS

<u>Code No.</u>	<u>Village</u>	<u>Code No.</u>	<u>Village</u>
1	Kasegaon	25	Kalamwadi
2	Dhotrewadi	26	Kedarwadi
3	Yeolewadi	27	Shene
4	Tambave	28	Wategaon
5	Kole	29	Bhatwadi
6	Narsingpur	30	Manikwadi
7	Shirte	31	Mahadeowadi
8	Yede Machindra	32	Peth
9	Kille M.Gad	33	Kapuskhed
10	Beradmachi	34	Sakharale
11	Lavanmachi	35	Khed
12	Bichud	36	Navekhed
13	Dudhari	37	Shirgaon
14	Takari	38	Waghwadi
15	Banewadi	39	Nayakalwadi
16	Satapewadi	40	Jambhulwadi
17	Masuchiwadi	41	Marsalnathpur
18	Pharnewadi (B)	42	Ozarde
19	Borgaon	43	Surul
20	Rethare Haranax	44	Rethre Dhrah
21	Kharatwadi	45	Shivpuri
22	Bahe	46	Kameri
23	Hubalwadi	47	Tujarpur
24	Nerle	48	Gatadwai

Conti..



Settlements and their Code Number conti..

<u>Code No.</u>	<u>Village</u>	<u>Code No.</u>	<u>Village</u>
49	Padawalwadi	71	Pokharni
50	Walwa	72	Nagaon
51	Ahirwadi	73	Dhawali
52	Karandwadi	74	Bagani
53	Mirajwadi	75	Phalakewadi & Chandachiwadi
54	Mardwadi	76	Kakachiwadi
55	Bawachi	77	Rozawadi
56	Gotkhindi	78	Shigaon
57	Yedenipani	79	Pharnewadi (S)
58	Itakare	80	Koregaon
59	Washi	81	Kanegaon
60	Ladegaon	82	Bahadurwadi
61	Dhagewadi	83	Tandulwadi
62	Gakraiwadi	84	Kundalwadi
63	Shekharwadi	85	Aitawade (Kh)
64	Karve	86	Devarde
65	Aitawade Bk	87	Chikurde
66	Karanjvade	88	Dongarwadi
67	Kurlap	89	Thenapude
68	Yelur	90	Ashta VII
69	Malewadi	91	Uran-Islampur VI
70	Bhadkimbe		

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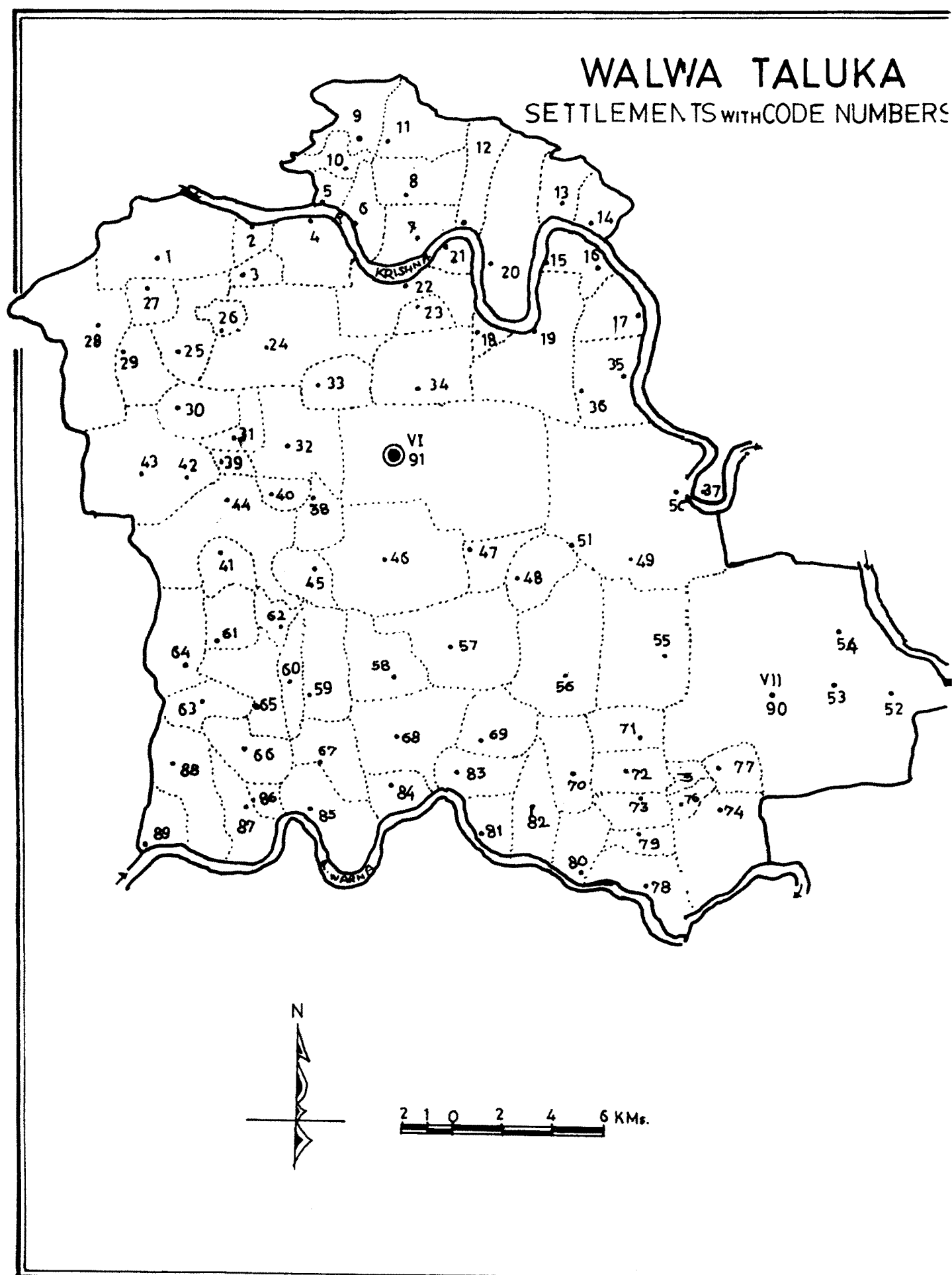


Fig. 1-7

### Approach to the present study

The present study attempts to examine the significant role played by service centres in Walwa taluka. Particularly attempts are made in the direction of identification of the service centre, spatial pattern of distribution of service centres. The service centres are evaluated in terms of their functional centrality and are organised in a hierarchic orders. The study also attempts to highlight on the complementary areas of the service centres and their delimitations.

### DATA BASE AND METHODOLOGY

The basic data pertaining to the service centres are collected through intensive fieldwork. The secondary sources i.e. district census handbook of Sangli district and Socio-economic abstract for Sangli district published in 1980-81 have been referred to population figures and other relevant statistical information.

It was observed that a settlement of 2,000 population is capable of having certain central functions. The detail necessary data regarding the settlements which have been identified as service centres are not available in the secondary sources. Hence in the collecting relevant statistical informations of service centres, a questionnaire was prepared and mailed to all Gram Sevakas (village officers) of identified service centres. It is worth mentioning that 100% questionnaire received back with fully filled.



The records of the Block Development Offices and the Statistical Offices were referred with the intention of cross checking the questionnaire data. Whenever there is discrepancy in the data, author has carried out an intensive fieldwork.

#### METHODOLOGY

The collected data have been processed on electronic calculator and presented in the revised form. Crude data have been arranged in the forms of tables and indices. Maps have been prepared by applying the revised tabular data and interpreted in the form of text. It is not necessary here to list the techniques used in the present study. The details regarding the methods and techniques are described at appropriate places in the text. In the present study, various indices of distribution and concentration have been used. Statistical techniques and cartographic methods are used in the data analysis.

#### IDENTIFICATION OF THE SERVICE CENTRES

In the identification and defining the service centres in a country like India, which is undergoing the processes of development and where social and economic bonds of the society are very rigid, one has to be careful. In view of this, 'A service centre is a place which caters the social, economic and administrative needs for the people of service area, as well as of the people itself'.

Service centres are the central places, as per Christaller (in 1933). It is a central settlement, where central is relative in meaning, it refers to regions but more correctly it refers to settlements dispersed over the regions. Therefore the settlements are mainly centres of the region. To Christaller, it could be a city or town or a village, which performs central functions. It provides services and goods to an area larger than itself.

R.C.Tiwari and N.U.Khan explained that, A service centre refers to any permanent settlement, which caters to the socio-economic needs of its tributary area through a number of services, which it houses by virtue of its central location and functional distinctiveness (National Geographers, Vol.XIX, No.2, December 84, pp.87 to 104).

It is an urgent need of how to identify and develop the service centres, to provide a package of goods and services which are necessary for the desired integrated rural development and hence K.N.Singh and others defines the service centres as : A permanent settlement with certain central functions, discussed in the sequel, functioning to cater to the socio-economic needs of the surrounding area may be treated as service centre (Transation - I.I.G. Vol.3, No.2, July 81, pp.137 to 148).

#### Identification of Service Centres

An attempt has made in this work to identify the service centres with certain attributes.

A permanent settlement with certain central functions, functioning to cater to the socio-economic needs of the surrounding area may be treated as a service centre. It has been identified on the basis of following five criterias.

1) Population size

The settlement must have at least 2,000 or more population.

2) Percentage of tertiary population

At least 10 percent of the working population of the centre should be engaged in tertiary activities i.e. in trade & commerce. In transport and communication and in other services.

3) Availability of at least, four central functions of the following :-

- i) Marketing functions
  - ii) Highschool/College
  - iii) Dairy co-operative society establishment
  - iv) Post office/Post and telegraph office
  - v) Primary health centre/Dispensary/Hospital
  - vi) Floor mills and chilly grinding mills
  - vii) Banks/Co-operative/Scheduled banks
- 4) The centre should be well connected with either by kacha or pucca road network.
- 5) The centre should be independent foci in the sense that it should not be an out growth urban centre.

On the basis of the aforesaid criterias and its application to settlements of Walwa taluka thirty five settlements are qualified

for the status of service centres. Out of these identified thirty five service centres two are urban centres and thirty three are villages.

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