CHAPTER. I

INTRODUCTION.

1) Nature of selected Problem.

2) Objectives and Significance of selected problem.

3) Methodology.

4) Scope and Limitations of Problem.

5) Concept of dairy Business.

6) Dairy farming in India :-

I) Development of dairy business in Maharashtra State.

II) Dairy business in Kolhapur District.

III) Dairy business in Ajara Taluka.

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(1.1) NATURE OF PROBLEM.

Dairy farming is known as a subsidiary business of agriculture. To make agricultural activities profitable, dairy business has to be given vital importance, In an agriculture based economy. To create more employment opportunities in the rural areas, more inputs are necessary, even in the dairy farming activity.

Milk is such an element which has vital importance in human food. Milk has two important nutritive ingredients, it is necessary for physical and mental development. Thus milk and milk products have a fairly large demand on day-to-day basis. The milk sector and the economy face various problem, particularly with respect to increase demand for milk from various parts of the community and lower supply, lack of adequate storage facility, as well as problems of production and distribution of milk.

Normally, milk is supplied by the rural areas where milk animals are reared. However, the supply of milk from sheep/goats is very negligible. The bulk of milk supplied in the country is buffalo milk followed by cow-milk. Thus buffalo and cow milk constitute a dominant part in the supply of milk to the dairies. Although the production of milk is done on private level, the collection and distribution of milk has been done at co-operative level also. The dairy farming has been a contributory factor of

the co-operative sector in the country. Thus, a study of various problems of these co-operative milk dairies and working of these co-operative socieities is in place.

In the present research study one co-operative milk dairy has been selected. This co-operative society is established at village Uttar, Taluka Ajara, District Kolhapur. The problem is studied under the 'case study method' technique. Thus a fairly deep study has been made about the working of the co-operative milk dairy. This research has been undertaken in the light of the objectives of the Janata Co-operative Milk Dairy, Uttur.

The objectives of the society are :-

1) To produce adequate supply of milk, as milk is a Principal element of human diet.

2) Efficient distribution of milk and milk products within permissible time limits, and expenditure.

3) As an agricultural subsidiary business, dairying provides additional employment opportinuties to rural population. Hence, it is necessary to make a proper analysis of the dairy business.

4) The co-operative movement gets good response through the dairy co-operative society. Hence, it is necessary to examine the dairy's performance.

5) To examine the over all effect of co-operative principals on the efficiency of co-operative dairy.

6) To evaluate the role of directors and members of the co-operative dairy.

1.2) OBJECTIVES AND SIGNIFICANCE OF THE SELECTED PROBLEM:

Generally, in case of dairy co-operative society, the membership, Share capital and profits reveal a weak base. Seasonal effects have been felt in the collection and distribution of milk. A number of obstacles are faced in the development of co-operative daries. Daries, thus can not succeed in reducing production costs and making their units viable. In many of the villages more than one co-operative dairy has been established. The expected goals at times appear, but mirages particularly for the co-operatives; Since at times they fail to make proper progress, and find themselves remaining economically weak.

Inl the present research work, an attempt has been made to examine the working of a co-operative milk dairy unit. The research work is under taken with special reference to the study of the " JANATA CO-OPERATIVE MILK DAIRY, UTTAR - 1984-1988 ". The problem has been studied under the case study method. The research study is limited for the five years only, 1984 to 1988. The study is made on various activities of the dair operations. The

conclusion have been drawn from the available data.

The present study an effort is made to examine the working of the Janata Co-operative Milk Dairy. How did it overcome a number of difficulties it faced.

Some objectives of this case study have beenl indicated below.

1) To study the progres of the Janata Co-operative milk Dairy, Uttar.

2) To examine the couses of the failure of poultry farming of the dairy.

3) To examine the role of the director of co-operative milk Dairy.

4) To undertake an indepth-study on the progress of the JMD during #984-88.

5) The Janata Co-operative Milk Dairy provides a number of benefits. It is necessary to bring out the nature and the importance of these benefits, and the difficulties faced by the consumers.

6) To evaluate the social work functions of the co-operative milk Dairy.

7) To examine the role of Co-operative milk dairy regarding village farmers wants.

8) To examine the role of District Central Milk Federation with regard to the development of local milk co-operative.

9) Reviewing various problems which larise in the rural economy. To suggest proper remedies about development of dairy.

I) Village farmers having interest in dairying, constitue those who produce and supply milk on lindividual private basis.

II) Gavalimen who collect milkl and sell it on private basis. (III) Co-operative milk daries which are constituted and local, District and state levels. (IV) Government dairies, which are managed by the government authorities.

10) The milk is an important component of humanl diet. Milk and milk products are used in everyday meals, because of its protein ingradients like C and D vitamin. These vitamins help to maintain one's mental and Physical Streingths. It is therefore necessary to produce milk on a large scale. It must be supplied to ordinary people at resonable rates.

11) Dairy Business has gained importance as an agricultural subsidary business. In rural areas it provides employment opportunities. It is a mean of creating employment opportunities.

12) Indian being a predominantly agricultural country,

the development and successful progress of the agricultural and allied sectors like dairying, can go a long way in meeting the needs of the economy. It is therefore necessary to create proper infrastructure for the development of the dairy business in India.

13) The local co-operative daries supply bulk quantity of milk to the District Milk Federation, as well as its affiliate units i.e. Gokul, Warana, Mahananda in Karnataka and Anand in Gujarat. These co-operative societies collect, store and supply milk to many cities and various regions. But all the activities of these projects depend on milk milk supply of local co-operative daries. So it is essential to increase the strength and efficiency of local dairy business.

14) In a rural area many co-operative dairies have been established. Economic conditions of the members of these daries are found to be poor. The total quantity of their share capital is always low, resulting in a handicap to the dairies' development process. In order to increase efficiency and to establish developed daries, there should be limitations on the member of such dairies. The limitations may take the farm of permission or a licence to start a new dairy project.

15) In India the co-operative enterprice has found expression in the fields of financial, Agriculture,

Processing Institutes, Sugar, Cotton and Jute Industries. With a view to goving a fillip to the Co-operative movement in the rural areas, priority should be given to Dairy Co-operatives.

16) Compared to the urban community the rural community is considerally weak, economically. The condition of the rural poor can be improved through various ways. One of the areas which can help achieve. This is co-operative dairy farming.

17) It is expected that, rural co-operative milk dairies would pay reasonable and proper rate to rural farmers. Besides financial assistance for purchasing cows and buffaloes can be provided by the co-operative daries through schemes aiding the borrowers/members.

18) The co-operative daries can encourage the establishment of co-operative movement in the rural areas on a more sound footing. It is therefore essential tol study the functions of dairy co-operatives. Which are based on co-operative principles.

1.3 METHODOLOGY.

In order to study the development of Janata Co-operative Milk Dairy, Uttar. 'Case study research method' and 'Comparative method are made use of.

A) Case Study Method :- The methods of scientific social research may broadly be divided in to two parts, - The statistical method and the case study method. The statistical methods are based on large scale collection of data, while case study is based on intensive study of comparatively few persons, some time confined to a very small number, in case only.

The case study is thus more intensive in nature. This field of study is comparatively limited but has more of indepth in it. It aims at studying every-thing about something, rather than some thing about every thing as in case of statistical method.

DEFINITION :- " Case study is a way of organising Social data so as to preserve the unitary character of the Social object being studied. Expressed some what differently it is an approach which views any social unit as a whole." [1]

Main sources of case study method,

- Personal documents - diaries, autobiography, memories, letters etc.
- Life History.

In personal documents, most of the people keep diaries, Write their autobiographies on memories. These personal document contain various events of the life of narrator or respondent. According to Pouline Young. " Personal documents reflect opportunity of experience whichl helps to lilluminate the writer's spersonality, social relations and philosophy."

A life history is the study of various events of respondent's life. These attempt to find their social significance. Life history data is generally gathered through prolonged interviews with the respondents.

Case study thus generally takes two forms, the use of written material about the respondent and the collection of data throughl interviews.

B) Comparative Method :- Comparative method is based on comparison. It is a very important method of research. This method is not very old in the field of science. The idea of good, better and best isl in relation to degrees. Similarly it is common thing to discuss intellectual capacity, political and financial position of on institution in comparison to others. Comparative method is a Scientific method in which comparative data is collected with a specific purpose and analysed and specific conclusions are derived from its results". [2]

For the present study, the case study method and comparative method are used. In order to study the development of Janata Co-operative milk dairy, the case study method is more proper. In depth study is made on various functions of the dairy. In Uttar Village there are two registrated Co-operative dairiys. (i) Janata Co-operative Milk Dairy, (ii) Bhaveshwari Co-operative Milk Dairy. Shri Bhaveshwari Co-operative Milk Dairy had failed

in 1985-86, compared to the Janata Co-operative Milk Dairy. Regarding this fact references to the working of these two daries have been made.

For this study, a sample of two primary daries and fifty dairy member has been selected.

SOURCES OF DATA COLLECTION.

For the present research study following kinds of data have beenl utilised.

- Primary Data.
- Secondary Data.

(I) Primary Data :- Primary data is obtained through the field visits, observations, interview schedules which are regarding the Primary dairy Co-operatives and dairy's member. The responses were obtained from the secretary of the Janata Milk Dairy and Shri Bhaveshwari Milk Dairy, Uttar, as well as Secretaries of the respective dairy Co-operatives whichl were established around Uttar Village and fifty dairy members of the Janata Co-operative milk Dairy.

For collecting Primary data following methods are adopted.

i) INTERVIEW :- To study the problems and working performances of dairy co-operatives, the interview technique was adopted. The director member of the District Milk Federation, the selected officials were interviewed

with the help of open ended and unstructured questions.

ii) QUESTIONNARIE :- The questionnaries were sent tofifty selected dairy members and selected dairy Secretaries respectively. For this purpose a questionaries of about 15 questions for secretary and 21 questions for dairy members were prepared.

iii) OBSENATIONL STUDY :- Primary data is always regarding a field survey. In the present study the researcher directly contacted the Janata Co-operative Milk Dairy and other One more dairy co-operative. The name of this other dairy is Bhaveshwari Co-operative milk dairy. The method of milk collection, Billing Procedure, Milk testing, attending monthly meetings veterinary and animal feed distribution facilities and other office registers, accounts were observed/examined.

(I) **SECONDARY DATA :-**

It is known asdocumentary source. The secondary data have been obtained from the record of the Janata Co-operative Milk Dairy Uttar, Chilling Centre, Ninganur, Dairy Development Office at Kagal, and Kolhapur. Published information i.e. Books, Journals etc. Periodicals have been also refered.

1.4) **SCOPEAND LIMITATIONS OF THE PROBLEM -**

The present problem ' The Janata Co-operative Milk

Dairy" is one of the case study of milk dairy. Precious study has been made on every function of this dairy. The scope of the present study is limited to the analysis ofl the performance of the selected Co-operative dairy located at Uttar Village. Present study covers the period from the year 1984 to 1988. In case of selected Co-operative dairy. This study is based on the one selected dairy from Village Uttar. However, there will be a significant difference amount different primary co-operative dairies in Ajara Taluka.

1.5) CONCEPT OF DAIRY BUSINESS.

The Dairing is known as an agricultural subsidiary business for a long period. In the recent period dairying has become a profitiable business among small and marginal formers.

The history of the dairy industry is old. The domestication of cattle and the use of their milk for human food began samewhere is Asia or North-east Africa between 6000 and 8000 B.C.[3] Before the cow was domesticated, it was probably hunted by primitive man. Over the years the cow has been used as a beast of burden and has been a source of food, an object of workshing, a source of sacrifical offering, and a subject of mythology. The cow's milk and it's products have beenl used for food, sacrificial offering, consmetics and medicants, the oldest written records are believed to go back to the sumerious ofl mesopotamia in a approximately 6000 B.C. Dairying was highly developed at that time. References to cattle and

milk are frequently made in the old testament and the New testament a-like.

The people of India were raisers of cattle as early as 2000 B.C. Butter was used as a food and as a holy offering to the gods. The butter was changed to ghee (Butter oil or clarified butter). The cow at that time was considered holy.

The dairy business is always concerned with the production, processing, bottling of milk, and providing it to the market. But in Indian rural areas particularly the dairy activities are concerned with production, collection and transport of milk to the Government or Co-operative chilling plants and the milk Federations. But few dairies like Anand in Gujarat, Dempo in Karnataka, Warna, Gokul projects in Maharashtra are engaged in production of milk products and milk processing.

Some concepts of Dairy business are enumerated as below,

The concept of dairying is -

a) "That department of farming, or of a farm, which is concerned with production of milk, butter and cheese, hence occasionally, the milch cows on a farm collectively".[4]

b) "The business of production, processing and bottling

and distributing milk and manufacturing butter and cheese".

d) "Rearing of milch animals and production of milk and its supply to the urban areas where it is needed and which activityis more remunerative to the dairy farmers".

According to the above concepts, a dairy is a milk processing industry and it is connected to farm. The milk is obtained by keeping milch animals. The milk is collected by dairy, chilled and bottled and sent to urbar community. In other words dairy industry is with the production of milk, manufacturing and processing of milk products.

CONCEPT OF CO-OPERATIVE DAIRY -

"Co-operation is an organisation of persons who have voluntarily joined together to achive common economic, social objectives with the formation of a democratically controlled business organisation. This organisation makes suitable contributions for capital formation. These organisations accept a fair share of the risks and benefits of the undertakings

Hence, the definitions of the co-operative institution are as follows :-

i) "Co-operation is a form of organisation wherein persons voluntary associate together as human beings on basis of equality for the promotion of the economic interests of themselves". Hurbert Calvert.

ii) Self help made effective by organisation". Sir Horace Plunkett.

ii) "A union of persons for the production and distribution of goods, in which the profits are shared by all the contribution members. " [5]

The private sector is characterised by explotation of commen man. A Dairy at private levels purchase milk at lever rate and sell it at higher rate with mixing water with it. This exists quite commonly in the private dairy business i.e. A Gavali man. But now a days dairy industry exists in private as well as in the co-operative secters. Since, the passing of the co-operative societies act of 1912, in each state there is a regular department of co-operation under a minister. It is an act of the government to improve the candition of economically weaker sections.

The dairy co-operatives are an organised agency and have base of democratic principals. Main objectives before the constitution of these institution are to same poor milk producers from malpractices of private agences, from these milk co-operatives benefits are gains both to the milk to the milk producer and consumer. It can also provide milk to consumers at a reasonable rate, can do timely payment to the producers, the payment depends, upon

the precentage of fat content.

In other words, The co-operative milk society at village level, collects milk from its members, transport it to the chilling plants which are established at regional levels and sometime supplies milk to the government agency through the federations.

1.6) DAIRY FARMING IN INDIA.

After studying the concepts of dairy co-operatives, it is essential to study the present condition of dairy in dustry in India.

In this study, the condition of dairy industry is written sequence wise. i.e. Country (India), State (Maharashtra), District (Kolhapur), Taluka (Ajara) and Village (Uttar) from which present study has be conducted.

India is a develeping Country, according to W.W. Rostrow in a developing country, the whole economy is always dependent on the progress of a agriculture. In India larger members of population is belowthe poverty line Agriculture subsidiary businesses like Dairy, Poultry, Piggery, Bee-keeping, fisheres, silk production etc. are a major sources of income to the weaker section of village families. These businesses play very important role in improving socio-economic conditions of weaker and back-womel sections of society as well as of the marginal farmers and land less agricultural labourers.

Dairying is known as a traditional business in India. Before independence there were few organised dairy farmin of processing of milk or pasteurisation was done on a very small scale for local use by certain government farms. In India, the mere chilling of milk for long distance. transport without heat treatment is not satisfactory.[6]

Military dairy farms in contonment towns were also started. These private farms were meant to produce milk, butter and cream for army units and their hospitals. These farms were also the first to cross Indian Cows with imported bulls. Before independence, there were some 60 farms with thousands of cross-bred cows in them, In the British period, prior to 1900. Edward Kaventer established Modern dairy farms in calcutta which was the then capital of India. A Dairy farm was started there primality for the use of the viceregal household and civilian and military officers. Kaventers had modern dairy farms at hill stations of Darjeeling and Simala, He first used milking machines to few high yielding imported cows.

The co-operative credit societies Act was passed in 1922. According to the act the first co-operative dairy society was established at Allhabad (U.P.) in 1913. There were 264 primary societies of 11,600 producers members upto 1938. The pattern of collection and sale was also followed by the privace milk agencies.

After independence, the Government of India decided

that economic development of the country should be carried on the basis of five yearly plans.

In First Five year Plan, with realising sthe importance of the dairy and industry and its related activities, with respect to employment and income generation Government of India made a provision of ₹. 7.81 crores for dairy development programme. The schemes of this programme are related to the supply of milk to large cities under hygienic conditions, supported by schemes of procurment from rural areas.

In the Second Five Year Plan, a provision of ₹.17.44 crores was made for the dairy development programmes which was increased to ₹. 36 crores in the Third Five Year Plan. In several Villages, the collection and supply of milk was to be under taken by a net-work of dairy co-operatives. With collection and distribution of milk many co-operation plants started manufacture of various milk products in this plan period too.

In the Third Five Year Plan, with regards to the development of dairying a qualitative change in the policy had been brought. It sought to develop dairy projects with greater emphasis on milk production in the rural areas linked up with milk plants for marketing of surplus milk in the urban cities. Through these the plant operation, processing, manufacture of milk products, distribution of

milk was to be done. Such operations of dairy had been worked on co-operation lines, on 26 september 1965 the ministry of Agriculture Government of India, constituted a National Dairy Development Board (N.D.D.B.) to develop dairy industry. The government of India encouraged to constituted N.D.D.B. after of co-operative milk dairy, which is now well known as "Anand Dairy" and its project name is "Amul". The major objectives of the NDDB are deseribed as below.

1) To make available the information, skills and technical services to increase production of milk.

2) To prepare facilities of studies with regard to dairy industry.

3) To promote general public utility projects i.e. Dairying, fisheries, Brewery, Animal husbandry etc.

4) To under take bulk procurement services.

5) To provide man power services for dairy and allied projects. In this case this board organised technical programmes for training personnel.

6) To offer consultency services on dairy and its allied operation i.e. Planning, quality control and marketing.

7) To organise research work in the fields of dairying and animal husbandry.

In 1969-1970 N.D.D.B. developed an integrated Scheme for development of dairy industry and marketing of milk, which is commenly known as 'Operation flood' This operation flod Porgramme during the period 1970 to 1981 (11 years) 14.6 million rural families and milk producers.

In the Fourth Five Year Plan the development of dairy farming was organised on the co-operative lines. Several during projects and cattle development Programmes were formulated for the rural areas.

In Fifth Five Year Plan was aimed at the development of dairy business on co-operative lines. This programme was lunched through a two tier organisation at the village level and district level. Actually expenditure in the fourth plan onl dairying was ₨. 39 crores.

In the Fifth Five Year Plan the Second stage, of the programme known as operation flood II was lunched. Tshe programme began in 1979, before this programme, the Indian dairy corporation (I.D.C.) was set up in 1970. It was set up to handle the donated commodities such as milk, milk powder and butter oil. In short period, the National Co-operative Dairy Federation of India Limited (N.C.D.F.) was also set up in 1972 for standardising the working of the milk co-operatives in India. In this year (1972) the expenditure on dairy development was ₨. 99 crores and similar expenditure in the seventh Five Year Plan was ₨.

121 Crores. "The Dairy Programmes in India are organised in Co-operative sector so that the entire chain of operations from milk Collection, transport, pasturization to distribution gets integrated." [7]

A sub-study group on dairy development has been appointed by the Ministry of Agriculture. This study group submitted its proposals in Augest 1972. A planned expenditure of this proposals was ₨. 4,479 million.

In 1974 Khada Federation had opened new milk product complex. This major complex is situated 8 K.M. away from the Anand Project. This project produces more protain contein various milk products. ' A production of the Kheda is known as Sagar or Amul' [8] This project has received foreign aid from the UNICEF and other agencies.

(i) DEVELOPMENT OF DAIRY BUSINESS IN MAHARASHTRA STATE.

Dairying has vital role tol plan in uplifting the canditions of economical weaker farmilies froml villages. It is a best alternative means of development of vast majority ofl the poor farmers, espacially small and landless labourers. In other states in India dairying is the treaditional business in Maharashtra State. The geographical area of Maharashtra is 3,07,690 Sq.Kms. out of this total land constituting 60 spercent is under cultivation. Of the total land cultivated only 12 percent

is under irrigation. According to the 1981 cerius report, the total population of Maharashtra was 6.28 crores. 66 percent of the population of Maharashtra is engaged in agriculture. Because at inadequate rain fall, Agriculture cannot become a means of livelihood so to make agricultural activities profitable it is essential to start a small businesses to supplement agriculture. The Government of Maharashtra has given first preference to dairy development programmes. As a result the Maharashtra Government has established a separate department for dairy development in the year 1958. For better development of dairy business, the government had decided to undertake dairy development Programmes on Co-operative lines. This implimentation has been undertaken since 1960.

The following table shows that the number of co-operative milk societies increased since 1961, in Maharashtra.

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Table No. 1.1

Details of Co-operative Milk Societies and Federations in Maharashtra State (1961-84)

Sr. No.	Details 1961	1961	1976	1982	1984
1.	Total Nos. of Milk Cooperative Societies	450	3773	8047	10024
2.	Total numbersof member Ship of Pri.Societies	17500	30,5200	774244	920000
3.	Paid-up share capital (Rs. in lakhs)	10	212	303	780
4.	Own Funds (Rs. in lakhs)	13	324	350	2350
5.	Purchase of Milk (Rs. in lakhs)	74	6613	7507	18500
6.	Sale of Milk and products.	77	7276	8570	19000
7.	Co-operative Societies in Profit:-	162	2162	4229	5100
8.	Profit (in lakhs)	2	142	204	300

Source : A.R. Karve and M.L. kandalkar. Dairy business and Co-operative Management (marathi) P.64, Year 1986, Page No. 64.

In this period of 24 years the number of societies increased from 450 to 10,024 and the increase in the membership was from 17,500 to 9,20,000. This shows, that the increasing in the number of co-operative Societies. Was not propertional to the increase in the membership at societies.

i) In 1961 there were 450 co-operative milk societies. The number increased to 10,024 at the end of 1984. An average increase in the number of milk co-operatives was 89 percent per year. But in the case of membership of these milk co-operative societies the increase was of the order of 22 percent per year. Finelly, the total membership of Co-operatives and number of co-operatives have increased but the ratio of membership has decreased.

ii) Secondly, of the total number of co-operatives, 36 percent were earning profits in 1961, 57 percent in 1976, 48 percent is 1982, 51 percent in 1984, this indicates that thedevelopment of dairycocperatives was mainly quantitative in nature.

iii) Since 1961 the perfermance of the dairy co-operatives in case of capital accumulation, purchasing ofl milk, sales of milk and its product has been good.

The pattern of development of the dairy co-operatives in Maharashtra is based on the 'And Pattern'. The Primary

Co-operative Societies are at the village level. These co-operatives collect milk from their members and supply it to taluka or District Co-operative Milk Federation. Sometimes these Primary Co-operatives supply their milk directly to the Government milk scheme for further processing.

For the development of the co-operative milk societies the Government of India started a New Scheme from 1970. This is know as 'operation Flood' this scheme is also implemented in Maharashtra.

According to this scheme, the Pattern of the co-operative Milk Societies is three tier one.

1) At Village level-primary milk Co-operative Society.
2) At District level-District Milk Co-operative Federation.
3) At State level milk co-operative federation.

"At present, there are 30 Government milk schemes working in the state with the daily production capacity of 18.30 lakh litres. The major work of processing and distribution of milk is done through these scheme. The important dairy Centres in Maharashtra are located at Bombay, Kolhapur, Aurangabad, Nagpur, Akola, Amrawati, Dhule, Nasik, Poona, Miraj.[9]

In operation flood II, 20 districts were selected. This scheme has been implemented in three different stage.

FIRST STAGE :-

Kolhapur, Jalgaon, Solhapur, Aurangabad, Jalana, Usmanabad, Latur, Buldhana.

SECOND STAGE :-

Pune, Nasik, Beed, Yewatmal.

THIRD STAGE :-

Sangli, Dhule, Satara, Chandrapur, Ghar-Chiroli, Bhandara, Raigad, Ratnagiri.

In Maharashtra, there were 103 milk Chilling centres and six milk powder plants engaged in their working. The plants which are located at Miraj, Udgir and Nagpur have been set up by the Govt. of Maharashtra. Another three plants one in the co-operative Secter located at Pune, Warana and Jalgaon.

In 1960-61 the average milk collection by Govt. Milk Scheme was 1.80 lakh litres per day. In 1983-84 the collection of Milk rose to 14.65 lakh litres per day. In particular in Maharashtra the milk production and collection varies according to season. Today there are 68 lakhs milk producers in Maharashtra engaged in milk business and 10,000 primary co-operatives are involved in job of milk procurment through out the state.

ii) DAIRY BUSINESS IN KOLHAPUR DISTRICT.

Before studying the place of co-operative milk societies in the economy of Kolhapur district, It is better to examine the Social, economic and Geographycal condition of this region.

In Maharashtra there are 30 district, Kolhapur being one. Kolhapur leads in the production of Sugar-Cane and Sugar. For the administration purposes, Kolhapur district has been divided into 12 talukas. The National High Way No.4 passes through this district.

Some talukas located in the Northem region are Know as "desh" and those which are located in the South Coast are known as "Kon Kan" region. The selected problem is taken from Ajara taluka. All the Geographical conditions of this taluka are similar to there of the Konkan region.

Infact, the boundry of the Sindudurga is close,to west boundry of Ajara taluka .

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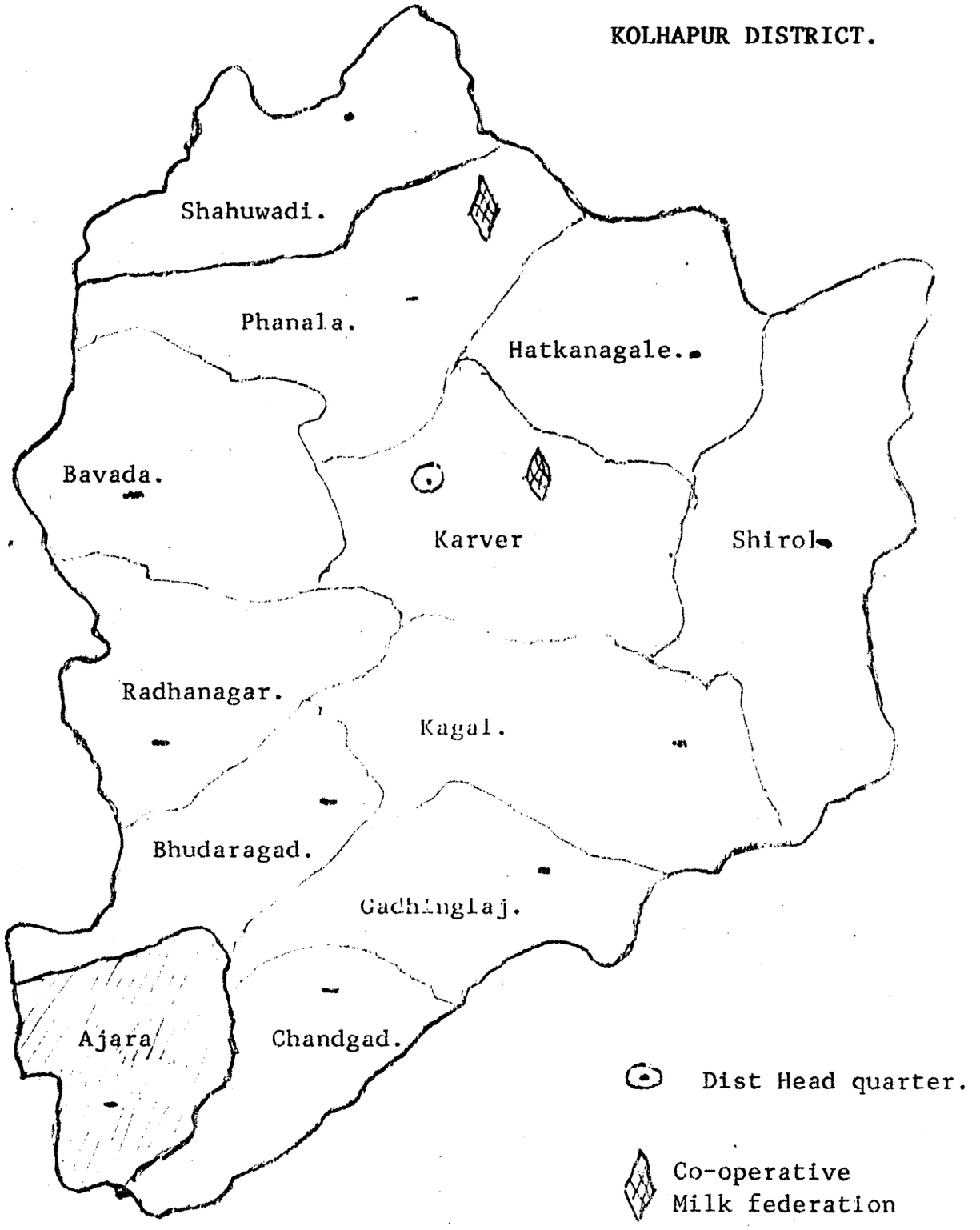
MAP NO.1.1.

Taluka and it's headquarter at the Kolhapur District.



above shaded region represents Ajara taluka.

The total region at Kolhapur district has been classified into three kinds i.e. Hilly area, Hill foot area and plane ground area. 600 Sq.KM. land of Kolhapur district is hilly, 450 to 600 Sq.KM is foot hilly and less than 450 Sq.KM is plane ground land.

PROPORITION OF MILCH ANIMAL IN KOLHAPUR DISTRICT.

According to the live stook survey of 1982 the number of milch animal (including buffaloand Cows) was 4,33,739 1,02,401 cows and 3,31,338 buffalows. The total number of artifically crossbred cows was 3,40,000 in Maharashtra of which 25,689 were located in Kolhapur District.

The taluka wise distribution of artifically bred cows in Kolhapur district is given below.

Hatkanagale	7,246
Karvir	4,512
Shiroli	4,113
Phanhala	2,712
Kagal	2,565
Gadhinglaj	1,432
Gaganbavada	5
Chandgad	160
Ajara	329

ANIMAL HEALTH SERVICES IN KOLHAPUR DISTRICT :-

It is essential to promote various health services for animals especially for the milch lanimals for their healthy grouth. Regarding this fact the Zilla-parished is interested to presides such accomodition at free of cost through their many 'Primary animal lhealth centres'. Such health despencery at every taluka place and at block areas also.

According to statistical information, animal health services were provided in Kolhapurdistrict also. According to the census of 1984-85, there were 3 district animal hospitals, 24 animal despenceries, 55 primary health centres, 133 artifical cemen centres and 24 docters in the Kolhapur District. At the end of the year treatment had been provided to 2,88,964 animals. There were 89,919 artifically bred animals in the distrct.

DAIRY DEVELOPMENT IN THE DISTRICT.

Dairying is the main agriculture subsidary business of rural peoples in the district. The non-availability of proper market is the main obstacle to the dairy development in the district. This same problem is also prevalent in other districts of the state also. Nowdays facilities of transportation and marketing have been extended. The collection and distribution of milkl is being efficiently in district.

There are three milk producers federations in the district.

a) Kolhapur District Co-operative Milk Producing Federation Ltd.,

b) Warana Co-operative Milk Federation Ltd.,

c) Shirol Taluka Milk Producing Co-operative Federation Ltd.,

In 1985-86 these three federations collected 8,15,28,141 litres at milk. The revenuethrough sale ofthis milk amount about ₨. 2,702.4 lakhs. The milk was collected through 939 co-operative milk societies and from 1,83,314 members.

Since 1978 the district milk federation has implimated the "Milk flood" scheme.

iii) DAIRY BUSINESS IN AJARA TALUKA :-

Profile of Ajara Taluka.

There are twelve tahsils in Kolhapur district, A men of these twelve blocks, Ajara, Chandgad, Gaganbavada, and Bhudhargad are rural and back-qoes bloxka. In Ajara tahsil, there are 89 inhabited villages and 2 uninhabited villages. The economical and social background of the Ajara block is as follows :-

AREA :-

As per the census of India 1881, the total Geographical area of the Ajara block is 55,184 hectares, out of which 14,346 hectares is under forests (26 Percent of the total land) and 5,602 (10.15 percent of the total) hectors is not available for cultivation and 7,138 hectores is cultivable waste land[9]. The average annual raintall of Ajara block ranges from 64 inches to 71 inches.

DEMOGRAPHY

According to the census of Indi 1971 the total population of Ajara was 84,439 in 1971 and grew to 94,499 in 1987. This show an increase of 11.91 percent in the decude.

The total population cersists of 43,518 male and 50,981.

In 1981, only 36.65 percent of the total population of Ajara block was able to read and write. These were 34,640 literates, consisting of 22,808 mades and 11,832 females. Therefore in 1981 out of the total population 47.58 percent male and 76.79 percent females remained illiterate. Literacy of SCs and STs population was only 25.63 percent.

In our country 50 percent of house holds live be

porerty line (B.P.L.) out of which 1/3 families have no land at all. In Kolhapur district 1,64,538 family members where in BPL list in 1981. Whereas in Ajara block 11,176 family members fall under BPL in 1981, the percentage of which with districts BPL family members come at 6.79.[10]

OCCUMPTIONAL DISTRIBUTION OF AJARA TALUKA.

According to 1981 census, the occumptional distributional of the total population of the Ajara block is shown in Table No.1.2. The main workers shown in the table means the workers who have worked at least for 6 months or 183 days in the preceding year such main workers were 43.17 percent of the total population consisting of 77.02 percent cultivators, 10.23 percent agricultural labour, 10.40 percent others and 2.29 percent workers were engaged in trade, commence and Industry. The marginal workers, mean those who worked for sometime during the previous year. But not for a major port of the year. Such marginal workers were only 6 percent of the total population.

contd....

TABLE NO. 1:2

Occumpational Distribution of the totoal population of Ajara block in 1980.

Sr.No.	Occumption	Nos. of workers			% of works to total worker.
		Male	Female	total	
	Main Worker	20506	20287	40793 (100)	43.17
1)	a) Cultivators	14588	16834	31422 (77.02)	
	b) Agricultural labours	1283	2916	4199 (10.29)	
	c) House hold industries manufacturing, processing services & repairs.	739	198	937 (2.29)	
	d) Other workers	3896	339	4235 (10.40)	
2)	Marginal workers	913	4762	3675	06.00
3)	Non-workers	22099	25932	48031	50.83
	Total (1+2+3)	43518	50981	94499	100.00

(Source - Census of India 1981)

Note : Figures in to brackets show % of workers with main workers.

Non-workers include students, dependants, retired persons, rentiers, beggars etc.,

IRRIGATION :-

The Ajara block is adversely lacking increase of irrigation facilities. The block lies in the 'Hiranyakeshi' river basin. The gross cropped area of Ajara blockl is 30,582 hectores but of which only 1,978 hectares net area is irrigated. It means only 6.46 percent of gross cropped area is under irrigation.

CROPP PATTERN :-

In Ajara tahsil generally brown soil is found. This soil is rich and fertile. At present the land under main crops is as under.

1) Rice	-	7,330	hectares.
2) Groundnuts	-	3,520	hectares.
3) Nachani	-	4,310	hectores.
4) Jawar	-	1,730	hectares.
5) Sugarcane.	-	1,243	hectares.
6) Other crops	-	3,267	hectares.
TOTAL	-	21,400	hectares.

DRINKING WATER :-

Villages in the Ajara tahsils are provided drinking water through wells, rivers,tanks, tubewells, etc. There

are ten problem villages as far as drinking water is concerned.

RURAL ELECTRIFICATION -

According to the information given by the officials all panchayat Samiti, Ajara. All villages have electricity for demostic purpose.

MEDICAL FACILITIES :-

There is one matenity and child Welfare centre, 3 primary health Centres, and 3 Primary health subcentres in the block. There is one family planning centre as well as four dispensaries in the region..

EDUCATIONAL FACILITIES.

There are 92 Primary Schools, 50 Secondary schools and one Senior College at the taluka Place.

INDUSTRIES :-

In this taluka all industries are small scale industries and house-hold industries, namely poha, bakery food product, furniture making, cash processing facteries, sow mill, milk daries etc. There is an urgent need of expansion of small scale, village and cottage industries.

BANKING

There are 3 branches of the nationalised banks working in the area of Ajara Tahsil, namely Bank of India, Bank of Maharashtra and Dena Bank. The Kolhapur District Central Co-operative Bank has opened six branches in the block. There is one branch of Maharashtra State land Development Bank Ltd. Two urban Co-operative Banks are working in the block namely Ajara Urban Co-operative Bank and Janata Sahalari Bank Ltd. Ajara. These banks meet the need of banking facilities of peoples of Ajara block.

LIVE STOCK IN AJARA BLOCK

In this taluka there are different types of local cows such as Khillar, Geer, Sindhi, and non discript indigenious cows, besides Hosten and Jersey cross breed cows. The types of buffalos are mainly Govajat, Pundharpuri, Mura, and Surati. The milch cattle population of Ajara taluka is shown as below.

TABLE 1.3

T A B L E - 1:3

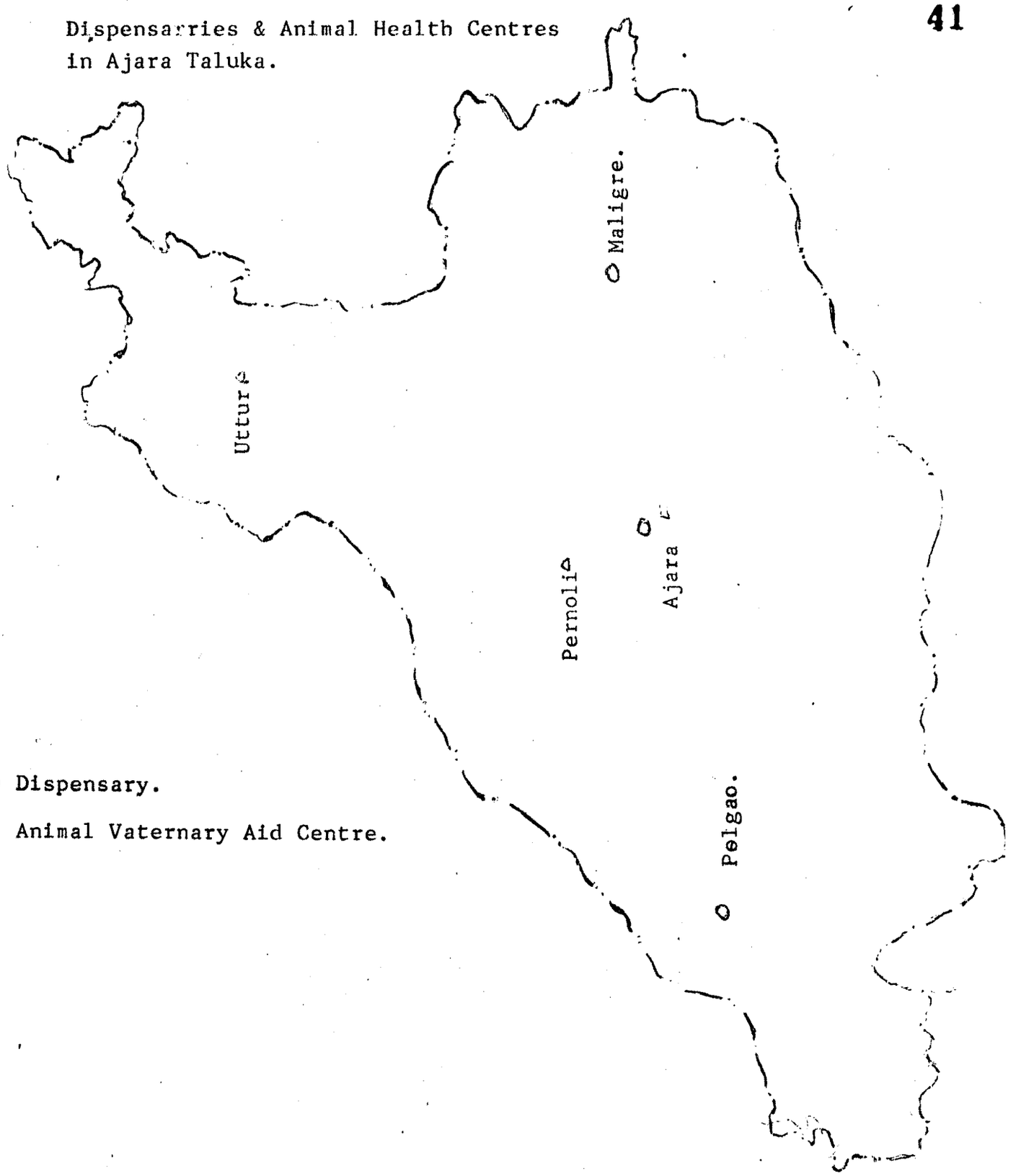
Sr No	District & Taluka	Buffalos	Cows	Total.	
1	Kolhapur	3,31,338	1,02,401	4,33,739	
2	Ajara	13,330	5,307	18,637	

Source : Live stock censum 31 Dec.1982.

DISPENSORRIES & ANIMAL HEALTH CENTERS IN AJARA TALUKA.

According to the census, 1987, the present condition of live stockl is progressive. Animal husbandry programme has been implimented through 5 animal dispensares and Animal aid Centres. In Ajara taluka there are two dispensaries located at Uttar and Ajara (Head quartre of Ajara taluka) and three veterinary aid Centres are at Polgav, Maligre, Pevnoli.

Dispensarries & Animal Health Centres
in Ajara Taluka.



O Dispensary.

△ Animal Vaternary Aid Centre.

A
11685

The map shows Zilla Parishad's Animal conservation scheme in Ajara taluka, Population of cows and Bulls is 15,316 and Buffelo. He buffelo is 23,361, Population of goats and sheep is 11,313 and that of hens is 3,676, and that pigs 49. to increase milk giving capacity of Mich animals and to prevent the deterioration of good milch animals. Veternatical aid centre and animal dispencers run various programmes like vaccination, free treatment to sick animals, for good breeding artificial insemination programmes are implimented through these aid centres and dispenceries.

TABLE - 1:4

Number of Milch animals in Ajara Taluka Non-cemenced Milch in Ajara in 1987.

Animals through	Cows	Buffalows.
artificial insemination	1229	01217
Nature Process	2610	14420
TOTAL	3839	15637

SOURCE :- Animal dispencery Centre Ajara.

Among 3,839 cows in Ajara taluka 304 are Jercy cows. There are as yet no Hosten-like new strength cows in Ajara Taluka.

DEVELOPMENT OF CO-OPERATIVE DAIRIES IN AJARA TALUKA.

There were 60 co-operative dairy Societies in Ajara taluka at the end of the year 1986-87. As compared to other talukas in the Kolhapur District, Ajara taluka stood at eleventh rank and the Gaganbavada Taluka was ranked last in the district. There were 11 primary milk co-operative dairy. While Karveer taluka comprised of too Primary milk co-operatives and stood in first in the District.

T A B L E - 1:5

Taluka wise Number of Primary co-operative Milk Societies in Kolhapur District.

Taluka	Total copperative dairy Societies.	Rank
Karveer	160	1
Panhala	121	2
Gadhinglaj	113	3
Kagal	104	4

Hatkanangale	101	5
Shirol	100	6
Radhanagari	97	7
Chandgad	80	8
Bhudargad	67	10
Ajara	60	11
Gadanbavada	11	12

Source :- Live stock census, 1972 & 1982.

The above table shows that business has not performed well in Ajara & Gagabavada, possible because of Ajara and Gaganbavada taluka being located in hilly and backward areas.

After 1987,twenty three more Pirmary Co-operative milk dairy were started. But are not yet legally registered. Table 1.6 shows that the Gadhinglaj Taluka ocupies the top position in the district and Ajara ranked eight with respect to the propotion of villages in the taluka. The taluka that has lagged behind in this respect is the Gaganbavada Taluka. The dairy activity needs special attentionl of the Government have as its involvement in dairy business is relatively poor. Considering the percentage of non-particlpating villages (41 percent) we can say that Government and KZDVS have a wide scopeto play its role for the extension of the dairy business in these villages.

Table 1.6

Talukawise villages' Participation in Dairy Development in the Kolhapur District.

Sr. No.	Taluka	Total Villages	Registered dairy	Participating Villages	Non-Participating Villages	% of non participation to Total Villages
1.	Gadhinglaj	93	113	92	01	01.02
2.	Shirol	56	100	53	03	05.36
3.	Kagal	95	104	84	11	08.66
4.	Hatkanagale	62	101	56	06	09.68
5.	Karveer	155	160	110	45	29.03
6.	Panhala	146	121	95	51	34.93
7.	Chandgad	145	80	79	64	45.52
8.	Ajara	109	60	54	85	50.46
9.	Bhudargad	140	74	67	73	52.14
10.	Radhanagari	172	97	73	99	57.56
11.	Shahuwadi	197	67	63	134	68.00
12.	Gaganbavada	48	11	11	37	77.08

It will be seen for Table 1.7 that there is a steady growth in total milch animals from 1961 to 1982.[12] The low rainfall reduced the availability of green-grass which resulted into decreasing the percentages of the milch animal in western taluka, including the Ajara taluka. Hence 50.4 percent villages remained non-participatory for co-operative milk dairy programmes.

According to the censues 1987 there were 60 primary milk co-operative in Ajara taluka. Between 1988 and 1990 fourteen new primary milk co-operative societies has started their functioning. The average growth rate of these primary milk socieites was 4.5 per year.

T A B L E 1:7

'Yearwise Registeration of Primary milk co-operatives in Ajara taluka 1964 - 1991.

Year	No.of socy. Registered	Total Milk co-operatives.	Total members	Total milch animals.
1964	1	1	90	N.A.
1965	-	1	90	
1966	-	1	90	
1967	-	1	90	
1968	-	1	90	

1969	-	1	90	
1970	-	1	90	
1971	-	1	90	
1972	1	2	102	
1973	-	2	102	
1974	2	4	180	
1975	3	7	212	
1976	1	8	82	
1977	1	9	70	
1978	5	14	309	392
1979	2	16	230	240
1980	3	19	192	210
1981	11	30	1200	4100
1982	11	41	3129	3129
1983	7	48	1000	11000
1984	8	56	1314	1343
1985	1	57	90	92
1986	1	58	191	191
1987	2	60	387	400+N.A.
1988	3	63	542	550
1989	4	67	800	607
1990	7	84	2033	1202

Source :- Ningnoor Chilling Center, Gadhinglaj, Collection department " Survey Report " copy No.2 Ajara taluka April/March 1990.

According to the date from table 1.7 the first Primary Co-operative Milk Dairy was registered in year 1964 in Ajara taluka. This one is Janata Co-operative Milk Dairy (JMD), which has been selected for the present case-study. During the eight years from 1964 to 1971 not a single dairy was registered in the Ajara taluka. There were many difficulties faced in constuting primary milk co-operative at the village level in Ajara Taluka.

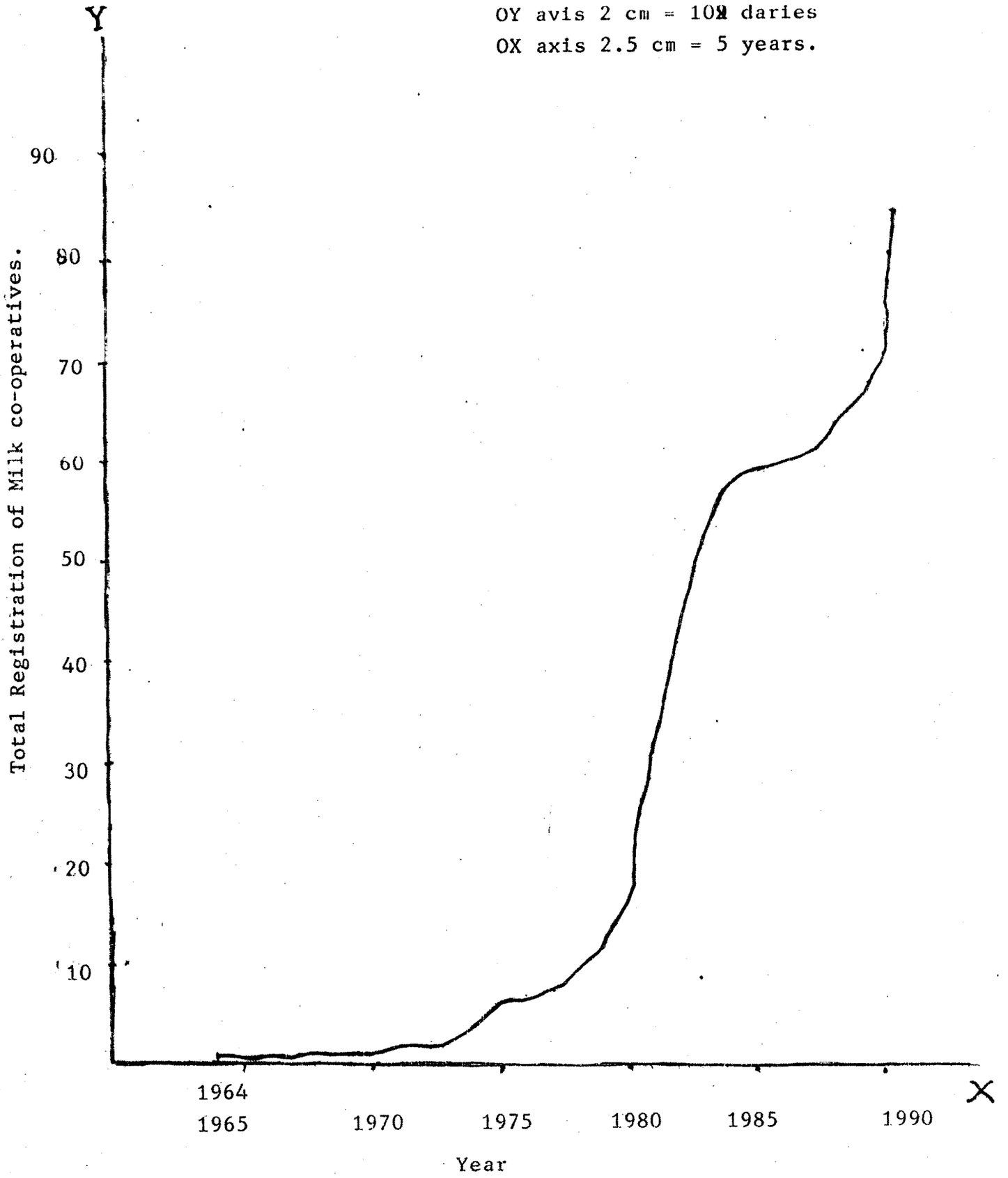
- defficiency of promotor/leader.
- Uneducated people.
- People do not under stand the Principales at co-operative milk dairy.
- lack of vaterinary?
- lack of proper roads and facilities.
- lack of new nutrient fodder as well as sufficient green fodder.
- There was no chilling plant to chill and preserve milk before transporting it to the district milk federation.
- During the period 1964-71, there were no 'new' cross-bred milch animals like Jercy, Hostan etc. in the Ajara taluka.

In 1972 the District milk federation of Kolhapur was established at Gadhinglaj. The construction of new chilling centre at Gadhinglaj promoted the villagers of

Graff 1.1

Graff shows increase of co-operative milk societies during period 1964 to 1990 in Ajara taluka.

Scale
OY avis 2 cm = 10 daries
OX axis 2.5 cm = 5 years.



the Ajara taluka, to stard new daries in the taluka. This 'chilling centre chilled milk collected from Gadhinglaj, Ajara and chandgad talukas. Since, the number of registered co-operative dairy society has increased during 1981 to 1990 from 30 to 84 respectively.

Milk socieities in Ajara taluka there are many reason for uneven increase in the number of co-operative milk dairy in Ajara taluka, particularly since 1981.

1) The Government of Maharashtra implimented various programmes to improve rural transportation i.e.Macadomised roads improvemention S.T.Bus, Post and telegram facilities etc.

2) establishment of chilling centre at Gadhinglaj (1972) near Ajara taluka.

3) Providing of loan facilities through Nationalized banks and multi purpose co-operative socieities for purchasing milch animals.

4) Availibility of new nutrient animal fodder at village level.

5) Free vaterinary services.

As well as district milk federation provided various

facilities and helped toestablished new milk cooperatives at the village level.

ROUTES OF MILK COLLECTION IN AJARA TALUKA.

The District milk federation(KZDUS) collects milk from 84 milk daries from Ajara taluka. Most region at the Ajara taluka is hilly, and roads connected to the dairy are rough. However the federation sends its trucks to these dairies to collect milk. Milk collected from Ajara taluka is sent to Ninganur chilling center. This centre is 10 K.M. from Uttur and 70 K.M. from Kolhapur. The nominal daily chilling capacity of the center is 30,000 liters but actually it can chill 50,000 liter per day. By this chilling process this chilling center increases the durability of milk. This centre collects milk from Ajara, Chandagud, and Gudhinglaj.

In Ajara taluka there are seven routes worked out to collect milk from Ajara taluka. These routes and the villages covered by it are mentioned below.

1) **Watingi Route** (15 villages)

- Handewadi., Posharatiwadi, Kolindre, Kine, Sirasangi, Morewadi, Watangi, Shurangarwadi, Uchangi, Chafawade, Jerur, Chitale, Shirsangi.

MALIGRE ROUTE.

(12 villages) Harur, Sarambal wadi, Kanoli, Maligre Pedrewadi, Hattiwade, Honewadi, Mendoli, Bolkewadi, Kandgao, Murude, Gagargao.

3) POLGAO ROUTE (7 Villages) :-

Latgao, Vite, Deolwadi, Khanapur, Arandol, Polgao, Sate wadi

4) KARPEWADI ROUTE (11 Villages)

Bekanal, Pendharwadi, Aradal, Halewadi, Holewadi, Wadaka shiwali, Mahagondwadi, Mahagon, Wazre, Honyli, Karpewadi

5) DHABIL ROUTE - (16 villages)

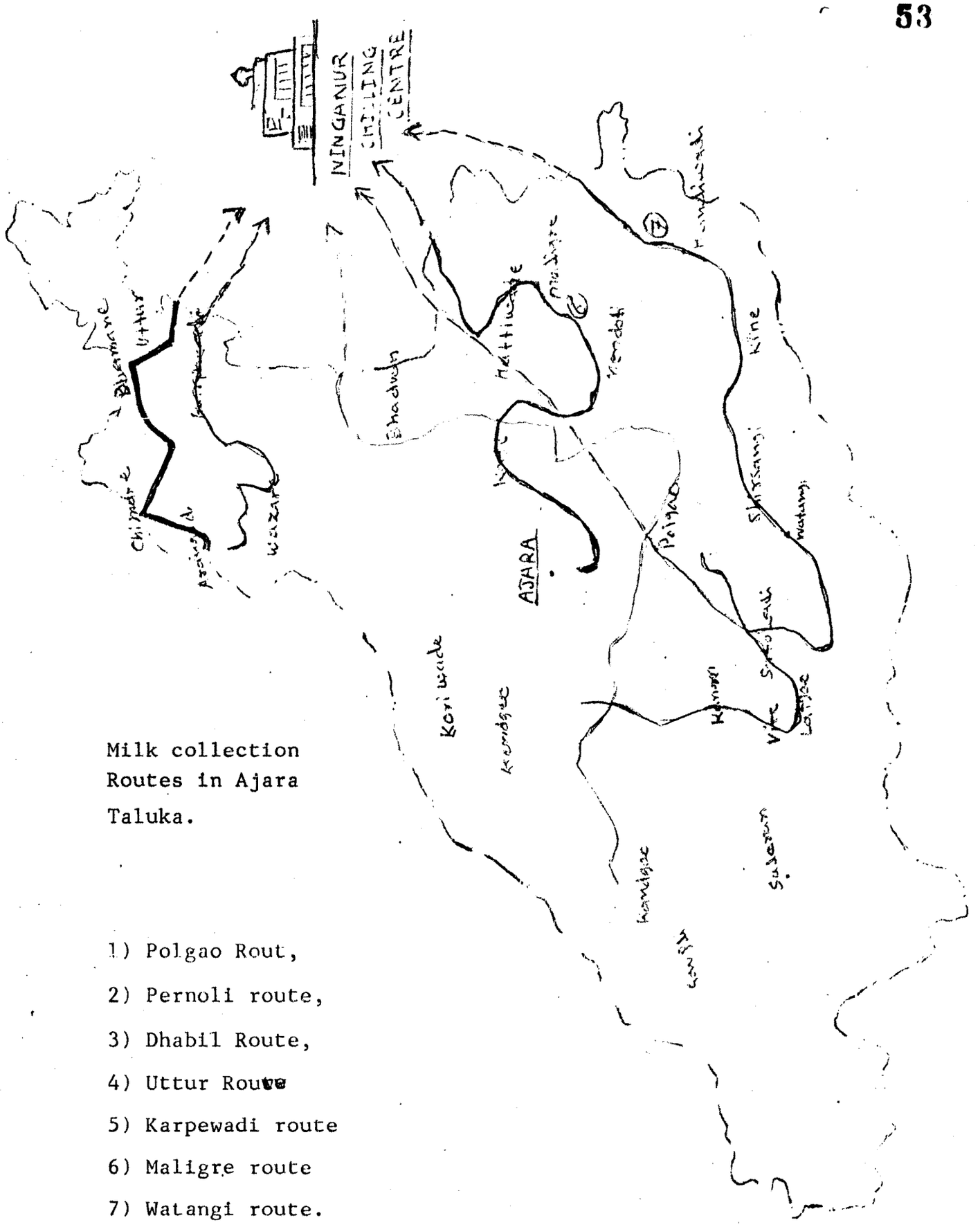
Ajara, Karpewadi, Parewadi, Bhasoli, Welwahi, Haloli, Devarde, Dardewadi, Parpli, Suleran, Medewadi, Dhabil, Shelap, Sulgao, Gavase, Parewadi.

6) PERNOLI ROUTE - (17 villages)

Karambali, Kaulge, Hiralage, Bhadvenwadi, Khoratwadi, Bhadvan, Masewadi, Madalge, Khede, Hajgoli, Sohale, Sulgao, Salgao, Pernoli, Koriwade, Kandgao, Harpewadi.

7) UTTAR ROUTE - (7 villages)

Uttur, Dhamane, Chavanwadi, Chimane, Aralgundi, Dhamene, Bediv.



Milk collection
Routes in Ajara
Taluka.

1) Polgao Rout,
2) Pernoli route,
3) Dhabil Route,
4) Uttur Route
5) Karpewadi route
6) Maligre route
7) Watangi route.

Few remining villages in Ajara taluka are connected to routes which come on Gadhinglaj and Changad taluka collection Centres, Kadgao route from Gadhinglaj taluka Collects milk from Mummewadi, Jakkewadi and Shipur, Ningudage route is connected to saroli and Ningudage villages, Wadarage Route collects milk of Bhahirewadi Village.

Villages mentioned above are in Ajara taluka. These villages are situated on the boundry of the Gudhinglaj taluka. The Collection of milk is probabley more economical, easily affordable, profitable and efficient, So that these villages are connected to the routes of Gudhinglaj taluka.

Trucks plythrough these routes twice day, in the morning and in the evening. Twentynine trucks are engaged in collecting milk for Ninganur chilling Centre. Out of these, 11 trucks are used for the Ajara taluka. A change of between ₹. 2.70 and ₹. 3.75 per K.M. is paid to the truck porters by the District milk federation. The District Milk federation makes aggrements with the transporter for collecting milk from the village and transporting it to the chilling centre for a period of one year.

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