

Indiaa Village Studies
Village Resurvey No. 12

NAM-DEURI

(Resurvey of a Plains Tribal Village in the
District of Jorhat, Assam)



DR. DURGESWAR BORAH
SATYENDRA NATH BURAGOHAIN

AGRO-ECONOMIC RESEARCH CENTRE FOR NORTH-EAST INDIA
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STUDY TEAM

General Guidance

Dr. P.D. Saikia.

Report Writing.

Dr. Durgeswar Borah.

Sri Satyendra Nath Buragohain.

Field Investigation.

Dr. D. Borah.

Sri S.N. Buragohain.

Sri K. N. Bordoloi.

Sri N.C. Borah.

Tabulation

Sri K.N. Bordoloi.

Sri D. Saikia.

Sri R. Borah.

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P R E F A C E

The present Report is the twelveth in the series of village resurveys completed by the Centre. The first point survey of Naa-Deuri village was conducted in February-March, 1930, and it was resurveyed in March-April, 1937. The changes that have occurred in the village during the seven years between the two surveys are highlighted in the report. The data embodied in the report relate to the calendar years 1929-30 and 1936-37.

Naa-Deuri is exclusively inhabited by the people of the Dauri Tribe and is situated in the north-western part of the Jorhat District. It is about 20km. away from Jorhat Town, the district headquarters. Some notable changes in the socio-economic conditions of the people of the village have taken place at the time of resurvey. Increase in agricultural production and income from non-traditional occupations like profession and services, salaried jobs, etc. have helped in raising the village income. However, the pace of agricultural development and overall economic development in the village is rather slow since the village has been experiencing recurring floods from the river Brahmaputra.

The villagers usually grow their crops in traditional method. However, the farmers take utmost care to raise two most important commercial crops, viz. Patal (*Trichosanthes dioica*, R.) and mustard with intensive human labour.

The agricultural tools and implements are mostly traditional, but two of the farmers purchased two new power tillers for tilling soils. The number of diesel pumpsets in the village has increased from two in 1930 to fourteen in 1937. The pumpsets are mainly used for watering seed beds of winter paddy, but for want of sufficient water source, these could not be used properly. Seven diesel operated shallow tube-wells were also installed in the village after the first point survey. These are used as and when necessary by those farmers whose farms are located near the shallow tubewells. Horse is a new addition to the village as draught animal. During the year of resurvey 33 horses were used for ploughing in the village while in 1930, no horse was used. Horses are mainly used by a section of farmers for drawing plough particularly during rabi season. As there has been a decline in the number of bullocks due to its high price, this has been gradually compensated with horses. There is enough scope of technological change in near future as the people

of the village are progressive. The extension personnel of the agricultural department have not made much worth mentioning inroads in the village in order to induce the farmers for adopting improved techniques in crop cultivation. Some infra-structural facilities like drinking water and electricity etc. are extended to the village. The number of tubewells in the village has increased from 10 to 22 during the intervening period which has considerably improved the drinking water facilities in the village at the time of resurvey. At this changing stage guidance and appropriate follow-up programmes from expert hands would be much needed to accelerate socio-economic development in the village.

Like all other studies of the Centre, the present one is a joint product prepared under my guidance and supervision. The team associated with the project is given elsewhere in the report. The report is written jointly by Dr. Durgeswar Borah and Sri S.N. Buragoina. Dr. T.N. Saikia, Research Officer has gone through the draft and offered valuable suggestions for improvement. The report is typed by Sri M.C. Miss Monju Dutta and Sri Bolin Bora. Sri Naren Deka mimeographed the report. I am thankful to all of them.

I would like to offer my sincere thanks to Sri Nagen B. Ghoshali, Sri Bikramsing Deuri, Sri Babusing Deuri and others of Nam-dih village who helped our investigators during field work.

December, 1983.

Dr. P. D. S.
Director

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CHAPTER ONE

INTRODUCTORY NOTE ON VILLAGE NAM-DEURI

1. The Village settings

1.1. Nam-Deuri village is situated in the north-western part of the Jorhat sub-division of the district of Jorhat, Assam. The village is inhabited exclusively by a tribal community, the Deuris. It is situated at a distance of about 20 km. from Jorhat town, the district headquarters. The village is connected with Jorhat town by a P.W.D. gravelled road. Kakilamukh-Kalbari is a feeder road that passes through the northern side of the village and linked with Jorhat Kakilamukh P.W.D. road. These two roads provide public conveyances and transport facilities to and from Jorhat town. The public buses ply daily between Jorhat town and Bahphola which provide transport facilities to the residents of Nam-Deuri and other neighbouring villages.

1.2. The village with a total number of 124 families is one of the biggest Deuri villages of Assam. Total population of the village is 1231 with 621 males and 610 females.

1.3. The Brahmaputra river is flowing only at a distance of about 2 km. in the northern side of the village. It provides larger char area (small river islands) with available green fields sufficient to feed the cattle population of the village.

1.4. There are some Mishing tribal villages located adjacent to Nam-Deuri village. The villages are Kareng Sapori, Bahgora, Sariguria, Kalbari and Bahphola. It is worthwhile to mention that Bahphola and Kalbari are two of the biggest Mishing villages of Assam. Upor Deuri is another Deuri village which is located at about 3 km. distance toward eastern side of Nam-Deuri village. There is no other Deuri village in the nearby areas. The other non-tribal communities living near the Deuris are the Chutiyas, the Keots and the Kaibartas. Dhonkuloi, a mixed village inhabited by people mostly belonging to Nepali, Bengali and ex-tea garden labour community is situated at about 3 km. away from the Nam-Deuri village. This village usually provides agricultural labours to Nam-Deuri and other nearby Mishing villages.

2. Climatic and Rainfall :

2.1. The climate and rainfall of the area in which Nam-Deuri village is situated is, by and large, similar with those of the Brahmaputra valley. The soil of the village is sandy-alluvial in texture and is very fertile. It was reported by the respondents that the village was previously affected by frequent floods during the summer. Prior to the construction of spur and dyke along with the bank of the Brahmaputra flood was a regular feature in monsoon season. However, flood continued to be a serious problem in the village still today and for this even some families left the village to some other parts of the state. On the other hand, crop cultivation during Rabi season is difficult due to lack irrigation.

3. Layout of the village :

3.1. Except a few Assam type semi pucca buildings all the houses in the village have been constructed on raised platform. Homestead of the majority of the families are small. Only a limited number of families have their traditional big raised platform house within their own spacious residential campus. Most of the houses are located mainly along the P.W.D. feeder road which passes through the village. However, a good number of houses are located on both the sides of village paths. Though the village has a very big area, many families have constructed their residential houses in compact form like small clusters which looks congested. The house type of the Deuris has been described in Appendix I of the Report.

3.2. The Deuris usually construct their graneries at a considerable distance from the main residential houses just to protect the graneries from accidental fire. The raised platform of the granery is a bit higher than the platform of the dwelling house as the space between the platform and the ground is used as handloom weaving shed for the family. A few families used such space for keeping their cattle. However, many families construct separate cattle sheds at a considerable distance from their dwellings. Pigsties are constructed below the platform of dwelling house and pigs kept in these pigsties generally clear the refuses dropped from inside.

3.3. It is interesting to note that the unmarried young boys of the Deuri community are usually not allowed to sleep inside the main residential house at night. A small cottage type of house without any raised platform locally known as 'Michon'

is built for young boys just near the main residence. Besides, sleeping at night, the grown up boys use the 'michon' for their study also. There are many such 'Michons' in the village.

3.4. The location of the village near the bank of the Brahmaputra river and the stady alluvial nature of the soil may be taken as a contributing factors for creating a natural drainage system. However, some low lying areas of the village suffer from water-logging during the most part of the year. These water-logged areas caused health hazard to the inhabitants as these are the breeding place of the mosquitoes. The low lying areas in fact spoil the sanitation and environment of the surroundings.

4. Educational Facilities :

4.1. The educational facilities of the village upto Higher Secondary standard is more or less satisfactory. Within the village, there are two lower primary schools. There is yet another lower primary school, named as Rupnath Brahma Adarsha Lower Primary School (Estt.1969) just at the boundary of the village. The students from Nam_Deuri also avail the educational facilities of this school. One M.E. School named as Lemchandra Tribal M.E.School (Esttd. 1952) is also located within the same campus and local students belong to both the Deuri and the Mishing communities can avail their education upto H.E. level. For obtaining high school level education, there is a Higher Secondary School at the outskirts of the village named Nam-Deuri H.S.School which was established in the year 1947 and it has recently been converted to Higher Secondary school. A good number of students from the village and nearby areas avail their high school level education at this school. There is also a recently established (1979) Girls' H.E.School at the southern end of the village. The Adarsa Janajati Higher Secondary School at Bahphola Mishing village which was established in 1970 and located at about 3 km away from Nam-Deuri village has also catered to the need of the village. Recently, an English medium Bethal Christian School for juniors (both for Nursery and Kindergarten) has been established by a young Naga teacher in March, 1986 at Kalbari, adjacent to NamDeuri village. The school has attracted the attention of many gurdians for giving English medium education to their children. So the school level education from lower primary to higher secondary level is, by and large, satisfactory as the facilities are available in and around the village. But for obtaining the college education, the students have to avail their education at Jorhat town mainly and other places of the state of Assam. On the whole, the educational facilities have improved considerably of the time of reservation.

5. Medical Facilities :

5.1. The general health of the people of Nam-Deuri village seems to be satisfactory. The State dispensary located at Kalbari which is only at a distance of about 1 km. from the village has been providing necessary medical facilities to the villagers. This dispensary was established in 1951. Now there is a full-time Doctor, one Pharmacist, one Nurse, one Mid-wife and a Chowkider. There are also staff quarters for all the categories of employees of the dispensary.

5.2. The district headquarters, Jorhat which is about 20 km away from the village also provides various medical facilities to the villagers in time of emergency. So, in respect of medical facilities, the Nam-Deuri village enjoys a somewhat better facilities than many other remote tribal areas of the State.

5.3. It was reported that there are a considerable number T.B. patients in the locality. A few cases of cancer was also reported in the village. Cold, cough, Dysentery etc. are the common ailments. Infestation of round and thread worm is most common among the children, the elders also suffered from worm infestation.

5.4. The village people also try to cure diseases by their traditional methods. Evil spirits and deities are supposed to cause various diseases and they are appeased by rituals and sacrifices. But now-a-days in most cases the enlightened families and many others come forward to take modern medical treatment. Their age-old traditional belief of curing diseases are gradually dying out in recent years to a great extent. The villagers expressed their satisfaction for the availability of the Doctor and other staff in the nearby dispensary.

5.5. The majority of the villagers usually get pure drinking water. There are a good number of tube-wells in the village with good drinking water. The number of tube-wells has increased considerably during the intervening period. There were only 10 tube-wells at the time of the First Point Survey. But the number of tube-wells has increased to 22 at the time of the resurvey. Majority of the tube-wells, as reported, were installed by individual households while others were installed by the Public Health Engineering Department and the Village Panchayat. On the whole, the position of drinking water in the village has improved at the time of resurvey.

6. Veterinary Facility :

6.1. A Veterinary sub-centre was established only in 1936 at Kalbari, which is hardly one kilometre from the Nam-Deuri village, where the villagers can avail veterinary services. There is a Doctor and a Field Assistant to serve the veterinary services in the area.

6.2. The most common parasitic disease of the cattle population of the locality is reported to be foot and mouth pigs, the disease known as swine fever is very common. It was reported that the epidemic of livestock, particularly the poultry birds had occurred in that area very frequently. In 1936, there were a heavy mortality of poultry birds due to epidemic disease.

6.3. The cattle, pigs and poultry birds kept by the villagers are generally of inferior local breed. Only one enlightened family has been rearing an improved jersy cow for milking and breeding purpose. There is sufficient grazing land in and around the village which provide facilities for rearing cattle population. The importance of improved breed of cow, pigs and poultry birds are not felt by the villagers. She-buffalow which also yield milk are maintained only by a few families. Keeping goats for commercial purpose is common in the village, but the number of goats are less because the area is flood affected. Rearing of ducks is also not significant.

7. Marketing facilities :

7.1. Jorhat, the district headquarters, provides a ready market for whatever the villagers have to sell or purchase. The villagers usually carry some of their surplus produce to Jorhat town by public buses. A good number of them also use their bicycles to carry their saleable products. Some of them even come to Rowroah and Chinnamora weekly markets which are located near Jorhat town to sell their vegetable products, poultry birds and pigs. Besides, there are two other small weekly markets within the radius of 4 km from the village. Besides, traders from Jorhat town visit the village to collect primarily vegetables when these are grown abundantly. The traders from Jorhat town use to purchase some commodities mainly vegetables, poultry birds, eggs etc. at a cheaper rate from these weekly markets. The villagers, on the other hand, usually purchase Kerosine, mustard oil, pulses, soap, onion, potag potato, tea, cotton yarn, cloth, salt, bidis, cigarettes, betel nut and leaves etc. for their household use.

7.2. Most of the households of Nam-Deuri village purchase their items such as utensils, medicine, building materials, furniture, cloth and other necessaries from Jorhat Town. There are also a few grocery shops in and around the village owned by local businessmen from where the villagers use to purchase their essential commodities. A few of such businessmen use to collect some crops, such as mustard, pea, paddy, potato, silk cotton ('simolutula') etc. from the villagers. It is learnt that a few traders lend money to the villagers in advance, particularly at the time of cultivation of crops and collect the products at a cheaper rate than the prevailing market prices as soon as they harvest the crops. Similarly in case of milk, traders who mainly belong to Nepali and Bihari community collect milk from some families at a much cheaper rate i.e. between Rs.3.00 and Rs.4.00 per litre and sell the same at Rs.6.00 per litre at Jorhat town.

3. Land Tenure and Tenancy System :

8.1. Land in the village is held mainly under two systems, viz. Periodic khiraj ('Myadi') and annual khiraj ('Alsona'). Periodic Khiraj land is held as full revenue paying, permanent heritable and transferable land. In annual khiraj there is no permanent right and the land cannot be transferred officially. Apart from periodic khiraj and annual khiraj land there are some government land in and around the village, the government land is mostly occupied by religious institutions, schools, hospitals etc. A considerable area of the government land is also reported occupied by some farmers for cultivation purposes.

8.2. Apart from the above categories of land, some of the respondents also reported that they have occupied some 'Char' area (small river islands) land of the Brahmaputra river. Such 'Char' area is mainly used for grazing their cattle population and to collect thatch. It was learnt that a few households in the village had earned a considerable income from the sale of thatch. It was also informed that a few affluent households of Nam-Deuri village maintained their cattle herd in the 'char' areas' for breeding and milking. The Nepali and Bihari milk traders use to collect milk at source.

8.3. Like all other plains villages of Assam, Nam-Deuri village also use to lease out and lease in their cultivable land to their co-villagers. In most cases cultivable land seems to be leased out by some small poor farmers mainly due to shortage of bullock power. The prevailing terms of such leased out land is kind rent, i.e. fifty per cent of the total produce has to be paid to the owner.

9. Cropping Pattern and Agricultural Method :

9.1. Agriculture is the principal means of livelihood in the village, though they live in flood affected area. They relish both Ahu (Autumn paddy) and Sali paddy (Winter paddy). Due to the construction of embankments of the Brahmaputra river in the locality they have been able to grow Sali paddy in wider scale. Now they give much stress on raising Sali paddy than Ahu paddy. Sali paddy is the dominant crop in the village which is grown by transplanting method. It is transplanted in the month of July/August and harvested in November/December. Ahu paddy is raised by broadcasting method. It is sown in February/March and harvested in July/August. The Bao paddy cultivation is raised by only a few families in a limited scale.

9.2. Though agriculture is more or less traditional the people of the village are not apathetic towards improved cultivation. Some families in the village have procured pump-sets at subsidised rate for irrigating their cropped area. Two families have got power tillers for tilling their fields. It is also learnt that some families use to hire power tillers during ploughing season. However, the traditional system of ploughing is widely prevalent. Introduction of horse as draught animal is of recent origin and they have learnt it from their Mishing neighbours. As the land being fertile due to occasional floods, the use of manure and chemical fertilisers are not considered essential by the farmers.

9.3. The cultivation of cash crops such as mustard, pea and Patal (*trichosanthes dioica*) is much popular in the village which has contributed a considerable amount to the village income. Pea is one of the new cash crops raised by many families in the village. It is raised in a relay cropping method. They broadcast the pea seeds in September/October without ploughing or any such land preparation, in between the rows of growing Sali paddy. After harvesting of Sali paddy in November/December pea creepers are allowed to grow on the standing paddy straw. Pea is harvested in the month of February/March. It is cultivated by a considerable number of families as it has proved remunerative without much input. The other crops, such as potato, black gram etc. are also grown both for sale and home consumption. Both kharif and rabi vegetables such as brinjal, ladies finger, cabbage, redish, pumpkin, gourd, bean, cucumber, chilly etc. are grown mostly for home consumption, only the surplus produced are marketed. A few households also raised tobacco and jute in a very limited scale. These are also used for domestic consumption. As a whole an atmosphere of change in agriculture is apparent in the village.

10. Weaving :

10.1. The Deuri women are very much labourious. In spite of their regular routine work like de-husking paddy, cooking, feeding and looking after their children, and many other domestic works, they find out time for weaving their traditional cloths. Weaving is a part of art and culture of the Deuri community. In absence of this skill, a Deuri women is considered unworthy, and it was a custom that the bride must weave her all essential weeding costume. During winter young girls are found to be busy in weaving their cloths all day long at their respective looms. They have a impecable taste for various design and colour. They prepare all types of clothings required for their family use, viz. Mekhala(Igu), Dhuti(Ikhu), Paguri (jama), Bed Sheet(Tope), Bor-Kapor etc.

10.2. Rearing Endi and silk for producing their traditional Endi Sadar (Eri-Selenj) and silk cloths (Pat-Kapor) are two important special enterprises of the Deuri women. In their leisure and off period, the womenfolk devote a considerable labour in spinning Endi and Silk for their pride products.

10.3. Each young Deuri girl is an expert weaver and they preserve their products in their individual seperate boxes for their future use. They hardly sell their products. They purchase cotton yarn from market for weaving their cotton cloths. All the products are exclusively meant for household use. During festivals they use their fine traditional dresses which enhance their cultural life more colourful.

10.4. Most of the womenfolk use their traditional looms for weaving their cloths. However, many of the families now-a-days use improved fly shuttle looms instead of traditional looms. It was reported that some fly shuttle looms were distributed by the Tribal Development Department in recent past to some selected weavers. They were also provided with spinning tools and fencing materials for (mulberry) plants to raise silk worm. However, it is learnt that the progress in this respect was not so much satisfactory.

Changes in Basic Demographic Factors

1. Size of Population and Households :

1.1. From the date of bench mark survey in February-March 1980 to the time of resurvey in March-April, 1987 the number of households in Nam-Deuri gaon has increased from 115 to 124 i.e. by 7.33 per cent during the period of 7 years. This changes in the numbers of households have been resulted mainly from the separation of families. It was, of course, gathered that during 1982-83 four villagers emigrated to Sadiya to settle there permanently. Nam-Deuri is a homogenous village inhabited exclusively by the Deuries, a plains tribe of the Brahmaputra valley. The change in the number of household may said to be quite normal for a plains tribal village of Assam.

1.2. The natural increase of population during the intervening period (1980 to 1987) have gone up from 1065 persons to 1231 persons. The growth rate of population is worked out to be 2.23 per cent per annum. This growth is found to be lower than the growth rate of Assam which was 3.5 per annum during 1961-71*. Of course, in this case, the emigration of the four families must be taken into consideration.

1.3. Table 2.1 shows the distribution of household and population of the village according to type of families for 1980 and 1987. The increase in the number of nuclear families over the period is 8.20 per cent and the joint families 9.80 per cent for the same period. The increase in population over the period in nuclear families and joint families are found to be 11.81 per cent and 25.69 per cent respectively. On the other hand, there has been a decline in the number of special type of families as well as persons inhabiting in this type.

* No census was conducted during 1981 due to the prevailing situation in the State.

Table: 2.1

Distribution of Household and Population according to Family Type
1980 & 1987 : Nam-Deuri.

Family Type	1980		1987		Variations From 1980 to 1987		Yearly % Variation of total
	No. of H.H.	Total Population	No. of H.H.	Total Population	No. of H.H.	Population	
Nuclear	56	381 (35.77)	61	426 (34.61)	5	45	1.61
Joint	51	580 (54.46)	56	729 (59.22)	5	149	3.67
Special	8	104 (9.77)	7	76 (6.17)	-1	-28	-3.85
Total	115	1065 (100.00)	124	1231 (100.00)	9	166	2.23

Percentage Distribution of Total Male and Female Population by Age Groups in Nam-Deuri : 1980 & 1987.

Age Groups	1980			1987		
	Male	Female	Total	Male	Female	Total
Below 5 years	7.23	7.42	14.65	8.45	6.50	14.95
5 - 10	9.48	9.20	18.68	8.28	8.13	16.41
10 - 15	5.82	7.04	12.86	6.34	7.31	13.65
15 - 20	5.92	6.48	12.40	4.95	6.17	11.12
20 - 25	4.80	4.22	9.02	4.30	6.02	10.32
25 - 30	3.75	3.38	7.13	4.95	3.82	8.77
30 - 40	5.35	5.27	10.62	4.79	4.39	9.18
40 - 50	3.94	2.82	6.76	3.90	3.17	7.07
50 - 60	1.59	1.69	3.28	1.71	1.79	3.50
60 & above	1.97	2.63	4.60	2.76	2.27	5.03
Total	49.86	50.14	100.00	50.45	49.55	100.00

1.4. The average size of the nuclear families is 6.98 persons in 1987 as against 6.30 persons in 1980. Similarly, the average size of joint type of families is 13.02 persons in 1987 as against 11.37 persons in 1980 indicating thereby that the average size in both these important type of families has increased during the 7 years. On the whole average size of household for the village in 1987 is 9.92 as compared to 9.26 in 1980. This indicate that the average size of households has slightly increased during the period and this can be considered normal for a tribal village.

2. Distribution of Population by Age and Sex :

2.1. The percentage distribution of age and sex for Nam-Deurigaon according to age-group is shown in Table 2.2. The distribution of population by age and sex for the village for 1980 and 1987 is presented in Tables 2.3(a) and 2.3(b) in details. The percentage of population in the broad age-group of 0-15 years has slightly declined to 45.01 in 1987 from 46.19 in 1980. On the other hand, population in the age-group of 60 years and above has increased from 4.60 per cent in 1980 to 5.03 per cent in 1987. But the percentage of population in the broad agegroup of 15-60 years has almost remained constant over the years, the figures for this age-group being 49.21 per cent and 49.96 per cent in 1980 and 1987 respectively.

2.2. The percentage of male to total population in Nam-Deurigaon has increased from 49.86 in 1980 to 50.45 in 1987. The striking feature in the change of demographic character in the village is the decline in the number of females per 1000 males. The figure for 1980 was 1006 and it came down to 932 in 1987. Fluctuation in the proportion of female to male are observed in the different age-groups. Major decline is observed in the age-groups of 0-5 years (-257), 25-30(-130) and 60 and above (-510) while there was major increase of female per 1000 males in the age-groups of 15-20(+151) and 20-25(+514) only.

3. Marital Status :

3.1. Population of Nam-Deuri gaon is shown in Table 2.4 according to sex and marital status. The porpotion of population by different categories of marital status has not differed much in the resurvey from those in the bench mark survey though total population has increased considerably over the period. The percentage of unmarried persons

Table : 2.3(a)

Distribution of village population by age and Sex.
 Nam-Deuri : 1987

Age Group	Male		Female		Total		No. of Females per 1000 males.
	No.	%	No.	%	No.	%	
Below 5 years	104	16.75	80	13.11	184	14.95	769
5 - 10	102	16.43	100	16.39	202	16.41	980
10 - 15	78	12.56	90	14.75	168	13.65	1154
15 - 20	61	9.82	76	12.46	137	11.13	1246
20 - 25	53	8.53	74	12.13	127	10.32	1396
25 - 30	61	9.82	47	7.70	108	8.77	770
30 - 40	59	9.50	54	8.86	113	9.18	915
40 - 50	48	7.73	39	6.39	87	7.07	812
50 - 60	21	3.38	22	3.62	43	3.49	1048
60 & above	34	5.48	28	4.59	62	5.04	823
Total	621	100.00	610	100.00	1231	100.00	982

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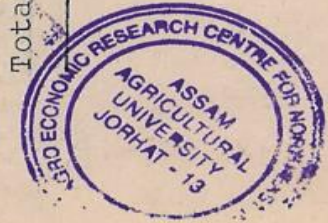


Table : 2.3(b)

Distribution of village population by age and Sex.
 Nam-Deuri : 1980

Age Group	Male		Female		Total		No. of Females per 1000 males	
	No.	%	No.	%	No.	%	No.	%
Below 5 years	77	14.50	79	14.79	156	14.65	1026	
5 - 10	101	19.02	98	18.35	199	18.69	970	
10 - 15	62	11.68	75	14.04	137	12.86	1210	
15 - 20	63	11.86	69	12.92	132	12.39	1095	
20 - 25	51	9.60	45	8.43	96	9.01	882	
25 - 30	40	7.53	36	6.74	76	7.14	900	
30 - 40	57	10.73	56	10.49	113	10.61	982	
40 - 50	42	7.91	30	5.62	72	6.76	714	
50 - 60	17	3.20	18	3.37	35	3.29	1059	
60 & above	21	3.95	28	5.24	49	4.60	1333	
Total	341	100.00	534	100.00	1065	100.00	1006	



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 1980-Deuri : 1980
 Distribution of Village Population by age and sex
 Table : 2.3(b)

Table : 2.4

Village Population by Sex and Marital Status : 1980 & 1937 /
Nam-Deuri.

Status	1980			1937		
	X Male	X Female	X Total	X Male	X Female	X Total
Unmarried	375 (70.62)	359 (67.23)	734 (68.92)	432 (69.55)	414 (67.87)	846 (68.72)
Married	145 (27.31)	147 (27.53)	292 (27.42)	169 (27.21)	172 (28.20)	341 (27.70)
Widow/ Widower	11 (2.07)	27 (5.06)	38 (3.57)	19 (3.06)	24 (3.93)	43 (3.49)
Divorced	-	1 (0.08)	1 (0.09)	1 (0.17)	-	1 (0.09)
Total	531 (100.00)	534 (100.00)	1065 (100.00)	621 (100.00)	610 (100.00)	1231 (100.00)

N.B. Bracketed figures are percentages of total.

Table : 2.5.

Distribution of population according to age, sex and Marital Status
Nan-Deuri, 1987.

Age Groups	Married		Unmarried		Widower/Widow		Divorced		Total		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Below 5 years	-	-	104	80	-	-	-	-	104	80	184 (14.95)
5 - 10	-	-	102	100	-	-	-	-	102	100	202 (16.41)
10 - 15	-	-	78	90	-	-	-	-	78	90	168 (13.65)
15 - 20	3	6	58	70	-	-	-	-	61	76	137 (11.13)
20 - 25	12	26	41	48	-	-	-	-	53	74	127 (10.32)
25 - 30	26	37	34	10	1	-	-	-	61	47	108 (8.77)
30 - 40	52	41	7	12	-	1	-	-	59	54	113 (9.18)
40 - 50	37	34	8	4	2	1	3	1	48	39	87 (7.07)
50 - 60	20	17	-	-	1	5	6	-	21	22	43 (3.49)
60 & above	19	11	-	-	15	17	32	-	34	28	62 (5.03)
Total	169 (13.13)	172 (13.97)	432 (35.09)	414 (33.63)	19 (1.54)	24 (1.95)	43 (3.49)	1 (0.08)	621 (50.45)	610 (49.55)	1231 (100.00)

Note: Bracked Figures are percentages of total.

Table 2.6

Distribution of population according to age, Sex and Marital status
Nam-Deuri, 1980.

Age Groups	Married		Unmarried		Widower/Widow		Divorced		Total		
	X _{male}	X _{female}	X _{male}	X _{female}	X _{male}	X _{female}	X _{male}	X _{female}	X _{male}	X _{female}	
Below 5 years	-	-	11	79	-	-	-	-	77	79	156 (14.65)
5 - 10	-	-	101	98	-	-	-	-	101	98	199 (18.69)
10 - 15	-	-	62	75	-	-	-	-	62	75	137 (12.06)
15 - 20	-	5	63	64	-	-	-	-	63	69	132 (12.39)
20 - 25	8	20	43	25	-	-	-	-	51	45	96 (9.01)
25 - 30	22	23	17	12	1	1	2	-	40	36	76 (7.14)
30 - 40	50	50	4	6	3	-	3	-	54	56	113 (10.61)
40 - 50	34	25	7	-	1	5	6	-	42	30	72 (6.46)
50 - 60	15	13	-	-	2	5	7	-	17	18	35 (3.29)
60 & above	16	11	1	-	4	16	20	1	21	28	49 (4.60)
Total	145 (13.62)	147 (13.80)	292 (27.42)	359 (33.71)	11 (1.03)	27 (2.54)	38 (3.57)	1 (0.09)	531 (49.86)	534 (50.14)	1065 (100.00)

Note: Bracked figures are percentages of total.

in 1930 and 1937 are 53.92 and 53.72 respectively. Similarly, in 1930, 27.42 per cent of total population were married and the corresponding figure for 1937 was 27.70 per cent. Thus, it is seen from Table 2.4 that changes in demographic characteristic of the village in respect of marital status are not significant during the period 1930-37.

3.2. Detail distribution of population of Nam-Deuri Gaon according age, sex and marital status is shown for 1930 and 1937 in Tables 2.5 and 2.6 respectively. One thing is clear from these two Tables that early marriage is not favoured by the Deuris. There were only 3 males and 5 females in 1930 who got married in between 15-20 years. But in 1937, no male person in this age group was found to be married. Number of persons both male and female not getting married even after 30 years has declined from 31 in 1930 to 18 in 1937. The important cause of such cases was stated to be economic hardship.

4. Educational Standard :

4.1. Table 2.7 shows the educational standard of the population of Nam-Deuri for 1930 and 1937. The percentage of literate persons in the village has increased from 42.16 in 1930 to 44.70 in 1937. This means that there has been a 2.57 per cent increase of literate persons of the village during the period.

Table 2.7

Educational Standard of the Population of Nam-Deuri 1930-37.

Educational Standard	No.	1930		1937	
		No.	Percentage	No.	Percentage
Literate	449		42.16	550	44.70
Illiterate	616		57.84	631	55.30
Total :	1065		100.00	1231	100.00

4.2. Distribution of population of Nam-Deuri gaon by age group, sex and educational levels is shown in Tables 2.3(a) and 2.3(b) for 1930 and 1937 respectively. The Tables indicate that number of persons in all the educational levels excepting the levels of L.P. Standard and H.S.L.C. Standard has increased in 1937. It is gratifying to note

Table 2.8(a)

Distribution of Population according to Educational Standard.

Age Groups	Illiterate		Literate		L.P. Standard			M.E. Standard			H.S.L.C. Standard		
	Male	Female	Male	Female	M	F	T	M	F	T	M	F	T
Below 5 years	77	79	-	-	-	-	-	-	-	-	-	-	-
5 - 10	56	53	-	1	44	43	87	1	1	2	-	-	-
10 - 15	16	25	-	-	22	30	52	21	14	35	3	6	9
15 - 20	24	29	3	2	5	12	17	7	3	10	21	22	43
20 - 25	16	22	2	9	11	2	11	5	-	5	13	9	22
25 - 30	17	23	6	2	3	1	4	1	1	2	8	4	12
30 - 40	25	48	10	1	10	3	13	6	1	7	4	3	7
40 - 50	15	27	11	1	6	2	8	3	-	3	4	-	4
50 - 60	7	16	3	1	3	-	3	2	1	3	1	-	1
60 & above	9	27	5	-	7	-	7	-	1	1	-	-	-
Total	262	354	616	17	57	93	202	46	22	68	54	44	98
			(57.84)		(5.35)		(18.97)			(6.39)			(9.20)

Table 2.8(a)

Educational Standard (Contd).
1980.

Age Group	H.S.L.C.: Passed		Upto Pre-Degree Standard		Graduate/Post Graduate		Professional and other Technical Education		Total					
	X	Y	X	Y	X	Y	X	Y	X	Y				
Below 5 years	-	-	-	-	-	-	-	-	-	-	-	-	-	
5 - 10	-	-	-	-	-	-	-	-	77	79	156	-	-	
10 - 15	-	-	-	-	-	-	-	-	101	98	199	-	-	
15 - 20	-	-	-	-	-	-	-	-	62	75	131	-	-	
20 - 25	2	-	1	2	-	-	2	-	63	69	132	2	-	
25 - 30	-	-	4	6	-	1	-	-	51	45	96	-	-	
30 - 40	-	-	3	3	1	-	1	-	40	36	76	1	-	
40 - 50	3	-	-	-	2	-	2	-	57	56	113	-	-	
50 - 60	1	-	-	-	-	-	-	-	42	30	72	-	-	
60 & above	-	-	-	-	-	-	-	-	17	18	35	-	-	
Total	6	-	8	3	3	1	3	-	531	534	1065	3	(0.28)	
														(100.00)

Table 2.8(b)

Distribution of population by Educational Standard, 1987.

Age Group	Illiterate		Literate		L.P. Standard		M.E. Standard		H.S.L.C. Standard					
	M	F	M	F	M	F	M	F	M	F				
Below 5 years	104	80	184	-	-	-	-	-	-	-	-			
5 - 10	43	39	82	12	9	21	44	46	6	-	-			
10 - 15	20	35	55	4	3	4	22	18	31	62	9			
15 - 20	7	19	26	5	9	14	5	1	21	24	45			
20 - 25	20	50	70	2	7	9	4	4	7	2	9			
25 - 30	25	34	59	7	2	9	3	4	11	1	12			
30 - 40	24	38	62	8	9	17	9	2	8	2	10			
40 - 50	30	33	63	11	4	15	2	1	2	1	3			
50 - 60	10	19	29	5	1	6	-	2	1	-	1			
60 & above	23	28	51	3	-	3	4	-	3	-	3			
Total	306	375	681	54	44	98	93	78	87	67	154	43	28	71
			(55.32)			(7.96)			(13.89)		(12.51)			(5.77)

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Table 2.8(b)

Educational Standard (contd.)
1987.

Age Group	X H.S.L.C. Passed		X Upto Pre-Degree		X Graduate/ Post Graduate		X Professional and Technical		X Total	
	X M	X F	X M	X T	X M	X F	X M	X T	X M	X T
Below 5 years	-	-	-	-	-	-	-	-	-	-
5 - 10	-	-	-	-	-	-	-	-	104	80
10 - 15	-	-	-	-	-	-	-	-	102	100
15 - 20	1	4	3	5	-	-	-	-	73	90
20 - 25	9	4	3	6	-	-	-	-	61	76
25 - 30	5	1	1	1	3	1	2	3	53	74
30 - 40	4	2	-	-	1	1	1	1	61	47
40 - 50	1	-	-	-	-	-	-	-	59	54
50 - 60	1	-	-	-	-	-	-	-	43	39
60 & above	1	-	-	-	-	-	-	-	21	22
Total	22	11	33	12	5	1	4	1	621	610
			(2.68)	(0.97)		(0.49)			(0.41)	(1231)
										(100.00)

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that the number of H.S.L.C. passed persons has increased to 33 in 1987 from 6 in 1980. Similarly, the number of graduate, post-graduate and professionally qualified persons taken together has increased to 11 in 1987 from 7 in 1980.

4.3. Table 2.9 shows the number of school/college going students of Nam-Deuri. It has been seen that the number of school/college going students has increased proportionately in 1987 over 1980 in the age-groups of 5-10 years, 10-15, 15-20, 20-25 and 25-30 years. The marked rise is observed in the age groups of 5-10 years and 15-20 years. In the former age-group the percentage of school going children to the total in that group rose to 63.31 in 1987 from 36.13 in 1980 while in the latter age-group of increase for the same period is 42.33 per cent in 1987 from 27.27 per cent in 1980. All these have been possible because of consciousness among the parents and education facilities available in and around the village.

5. Economic Status :

5.1. The population of the village is classified according to economic status i.e. as worker, helper and non-worker and presented in Table 2.10(a) and 2.10(b). It was observed that in the village some persons even below 15 years of age and some others from the age group of 60 and above are workers. In a tribal situation, even in the plains, all the able bodied persons participates in gainful activities, where the economy is primary based on agriculture. Even the students residing at home help their parents in day to day work. Particularly in the agricultural season almost all students participate in agricultural work. In other words, it can be said that all able-bodied persons in the village contribute their labour in family farming activities. However, some changes are noted at the time of resurvey.

5.2. It has been seen from Tables 2.10(a) and 2.10(b) that the percentage of workers in the village to total population has slightly declined to 45.65 in 1987 from 43.45 in 1980. Similarly, the percentage of helpers has also came down to 8.69 in 1987 from 15.37 in 1980. As a result, 45.66 per cent of total population returned as

Table 2.9
No. of School/College going children according to age-group
Nam-Deuri (1980 & 1987)

Age Groups	1980				1987			
	No. of Students		P.C. of School/College going students to total population of the age-group	No. of Students		P.C. of Students to total population of the age-group.		
	Male	Female		Male	Female			
5 - 10 years	37	35	72	36.18	69	70	139	68.81
10 - 15	41	39	80	58.39	59	57	116	69.05
15 - 20	23	13	36	27.27	33	25	58	42.33
20 - 25	5	2	7	7.29	17	11	28	22.05
25 - 30	1	-	1	1.32	3	1	4	3.70
Total	107	89	196		181	164	345	

Table 2.10(a)

Distribution of Village Population by Age, Sex and Economic Status
 Nam-Deuri : 1930.

Age Groups	Worker		Helper		Non-Worker		Total			
	M	F	M	F	M	F	M	F		
Below 5 years	-	-	-	-	77	79	156	77	79	156
5 - 10	-	-	-	-	101	98	199	101	98	199
10 - 15	12	13	44	55	6	7	13	62	75	137
15 - 20	37	54	26	15	-	-	-	63	69	132
20 - 25	45	43	6	2	-	-	-	51	45	96
25 - 30	39	26	1	-	-	-	-	40	36	76
30 - 40	57	56	113	-	-	-	-	57	56	113
40 - 50	38	30	68	-	4	-	4	42	30	72
50 - 60	17	18	35	-	-	-	-	17	18	35
60 & above	12	9	21	13	2	6	8	21	28	49
Total	257 (24.13)	259 (24.32)	516 (48.45)	85 (7.98)	190 (17.84)	190 (17.84)	380 (35.68)	531 (49.86)	534 (50.14)	1065 (100.00)

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Table 2.10(b)

Distribution of Village Population by Age, Sex and Economic Status,
Nam-Deuri : 1937.

Age Groups	Worker		Helper		Non-Worker		Total		
	M	F	M	F	M	F	M	F	
Below 5 years	-	-	-	-	104	80	184	104	80
5 - 10	-	-	-	-	102	100	202	102	100
10 - 15	15	17	32	24	45	49	94	78	90
15 - 20	13	41	54	19	17	16	33	61	76
20 - 25	26	51	77	7	21	16	37	53	74
25 - 30	52	42	94	1	8	4	12	61	47
30 - 40	59	54	113	-	-	-	-	59	54
40 - 50	48	39	87	-	-	-	-	48	39
50 - 60	21	22	43	-	-	-	-	21	22
60 & above	34	28	62	-	-	-	-	34	28
Total	268	294	562	51	107	265	562	621	610
	(21.77)	(23.83)	(45.65)	(4.55)	(4.14)	(3.69)	(24.13)	(21.53)	(45.66)
								(50.45)	(49.55)
									(100.00)

Nam-Deuri : 1937
 Distribution of Village Population by Age, Sex and Economic Status
 Table 2.10(b)

non-worker in 1937, the corresponding figure for 1930 being 35.53 per cent. This clearly indicates that rate of dependancy in the village has increased during the period 1930-37 which is usually not the characteristic of a tribal village. Usually the rate of dependency in tribal villages is observed to be low. However, the present one can be said to be a recent trend of change in the tribal villages where there is wider scope for spread of of education. The guardians realising the value of education, want their sons and daughters to devote most of their time in their studies.

CHAPTER III

Changes in Economic Resources.

1. Introduction ;

1.1. In this Chapter, the changes in the economic resources of the village that have occurred from 1980 to 1987 are discussed. Economic resources of a predominantly agricultural village are mainly the land resources under the control of the villagers. Along with land, livestock, agricultural tools and implements, labour, capital, etc. are included in economic resources for a village that derives its major income from agriculture.

2. Land Utilisation Pattern in the Village :

2.1. Land utilisation pattern of owned land of Nam-Deuri gaon for 1980 and 1987 is shown in Table 3.1. Land under possession of the villagers has slightly declined to 376.60 hectares in 1987 from 400.01 hectares in 1980. This is because of sale of land by some families that emigrated to Sadiya area where fertile soil were available at a comparatively cheaper rate. With the decline in total land there has been a decline in net cultivable area of the village. On the other hand, along with the increase in the number of households as a result of separation, land under homestead and courtyard has slightly increased in 1987 over that of 1980. Another important change in land utilisation pattern is increase in area under current fallow and this is natural for a village located near a river.

2.2. The land ownership pattern by size group of operational holding for 1980 and 1987 is shown in Table 3.2. In 1980, four households did not have any operational holdings while the number of households under this category has reduced to three in 1987. Similarly, the net cultivable area in the village has also been reduced to 317.29 hectares in 1987 from 325.36 hectares in 1980 though the number of households has increased from 115 to 124 during the same period. Some of the villagers leased out 8.24 hectares and mortgaged out 0.67 hectare of land in 1980 whereas in 1987, only 2.02 hectares of land was leased out and no land was mortgaged out.

Table 3.1.

Land Utilisation Pattern in Nam-Deurigaon

	1980		1987	
	Area (In hect.)	Percentage	Area (In hect.)	Percentage
A. <u>Cultivable Land</u> :				
1. Net Cultivated Area	334.77	83.69	319.31	84.79
B. <u>Land not available for Cultivation.</u>				
I. Land put to Non-Agricultural use, homestead & courtyard.	22.85	5.71	23.49	6.24
II. Barren land and others not available for cultivation .	1.20	0.30	-	-
C. <u>Other Uncultivable Land</u>				
I. Permanent pasture and grazing land.	-	-	-	-
II. Land under miscellaneous tree crops and grooves.	13.65	3.41	14.91	3.96
III. Land under Thatch .	15.29	3.82	9.18	2.44
IV. Cultivable waste land.	11.14	2.79	-	-
D. <u>Fallow Land</u>				
I, Current fallow	1.11	0.28	9.71	2.57
II. Permanent fallow	-	-	-	-
Total	400.01	100.00	376.60	100.00

Table 3.2.

Land Ownership pattern by size-group of Operational Holding
 Nam-Deuri : 1980 and 1987.

Size group of operational holding. (In hect.)	(Area in Hectares)																
	1980							1987									
	No. of H.H.	Total Area owned	Area under Homes	Area under Cultivated	Area under Fallow	Area under Orchard	Area under Misc. Trees	Total Area	No. of H.H.	Total Area owned	Area under Homes	Area under Cultivated	Area under Fallow	Area under Orchard	Area under Misc. Trees		
Landless	4	2.57	0.27	0.14	-	2.16	-	3	1.10	0.16	-	-	-	-	0.94	-	
Below 1 hect	15	12.37	1.42	0.07	-	0.54	0.67	13	10.93	1.79	-	-	1.89	-	-	-	
1 - 2	23	32.48	2.78	0.74	0.32	2.52	-	34	54.35	5.53	1.33	0.94	2.02	-	-	-	
2 - 3	28	80.11	4.59	2.81	3.29	3.72	-	37	99.22	6.79	4.84	1.64	-	0.54	-	-	
3 - 4	16	69.19	4.86	2.16	1.62	2.36	2.57	12	48.42	2.56	1.01	0.94	3.24	0.54	-	-	
4 - 5	13	65.54	3.32	1.74	4.12	0.13	0.81	5	21.39	1.21	0.89	1.21	0.81	-	-	-	
5 - 7.5	8	48.10	2.30	1.13	2.70	1.20	-	14	85.41	3.97	4.25	2.43	1.75	-	-	-	
7.5 - 10	6	57.38	1.82	2.16	2.70	1.36	-	6	55.73	1.48	2.59	2.02	-	-	-	-	
10 & above	2	32.27	1.49	2.70	0.54	2.16	2.16	-	-	-	-	-	-	-	-	-	
Total	115	400.01	22.85	13.65	15.29	13.45	8.24	0.67	325.86	124	376.60	23.49	14.91	9.18	9.71	2.02	- 317.29

3. Operational Holding :

3.1. The distribution of cultivable land of the village by operational size group is presented in Table 3.3 and the percentage distribution of operational holding by size group is shown in Table 3.4. The villagers leased in 16.89 hectares and mortgaged in 5.27 hectares of cultivable land in 1980. The owners of leased in land are either from the village itself or from neighbouring villages. The area under leased in land has increased to 34.12 hectares in 1987; but no land was mortgaged inⁱⁿ that year. The rice in leased in land may be due to smallness of owned cultivable land for sub-division and fragmentation of holdings due to separation of families. On the other hand, presence or absence of mortgaged in land depends on availability of ready cash to invest as well as needy and willing land owners to mortgaged out. On the whole, total area under operation has increased to 351.41 hectares in 1987 from 348.02 hectares in 1980. This increase in total operational holding even after emigration of four households from the village is due mainly to increase in leased-in land.

3.2. Though there was a fall in both number of marginal farmers (below 1.00 hectares) and area they operated in 1987, the the number of small farmers increased to 34 (27.42%) in 1987 from 23 (20.00%) in 1980. The consequent rise in operational holding in the group is 14.17 per cent from 9.17 per cent of total operational land of the village. In the case of the Semi-medium farmers (2.00-4.00 ha.), the rise in number of such farmers is to 49 in 1987 from 44 in 1980. But the consequent rise in operational holding for this category of farmers from 1980 to 1987 is only 1.27 per cent. There has been a slight fall in the number of household in medium sized farms (4.00 - 10.0 ha.) from 27 in 1980 to 25 in 1987. But the percentage of land operated by the medium farms has increased to 45.66 in 1987 from 44.76 in 1980. The most striking feature in the classification of farmers according to size group of operational holding is the absence of big farmers in the village in 1987 whereas 2 (two) big farms were recorded in the village at the time of first point survey.

3.3. The average size of operational holding per household for the village as a whole declined to 2.83 hectares in 1987 from 3.03 hectares in 1980. Some rise and fall in the average

Table 3.3.

Cultivable Land distribution of households and area under operation by size group of operational holding; Nam-Deuri 1980 & 1987 (Area in hectares)

Size group of Operational holding (In hect.)	1980						1987					
	No. of H.H.	Owned land under personal cultivation	Land leased in	Mortgaged in	Total Operational holding	Average size of operational holding	No. of H.H.	Owned land under personal cultivation	Land leased in	Mortgaged in	Total Operational holding	Average size of operational holding
Landless	4	-	-	-	-	-	3	-	-	-	-	-
Below 1 hect	15	9.67	0.68	-	10.35 (2.97)	0.69	13	7.25	1.48	-	8.73	0.67
1 - 2	23	26.12	5.27	0.54	31.93 (9.18)	1.39	34	44.53	5.26	-	49.79	1.46
2 - 3	28	65.70	3.92	-	69.62 (20.01)	2.49	37	85.41	4.32	-	89.73	2.43
3 - 4	16	55.62	1.08	0.41	57.11 (16.41)	3.57	12	40.13	2.56	-	42.69	3.56
4 - 5	13	55.42	-	1.62	57.04 (16.39)	4.39	5	17.27	4.58	-	21.85	4.37
5 - 7.5	8	40.77	5.94	-	46.71 (13.42)	5.84	14	73.06	10.52	-	83.58	5.97
7.5 - 10	6	49.34	-	2.70	52.04 (14.95)	8.67	6	49.64	5.40	-	55.04	9.17
10 & above	2	23.22	-	-	23.22	11.61	-	-	-	-	-	-
Total	115	325.36	16.89	5.27	348.02 (100.00)	3.03	124	317.29	34.12	-	351.41	2.83

Table 3.4.

Percentage of operational holding by size group,
Nam-Deuri : 1980 & 1987.

Size group	1980				1987			
	Household		Area under operation		Household		Area under operation	
	No.	P.C.	No.	P.C.	No.	P.C.	No.	P.C.
Landless	4	3.48	-	-	3	2.42	-	-
Below 1 hect.	15	13.04	10.35	2.97	13	10.48	8.73	2.48
1 - 2	23	20.00	31.93	9.17	34	27.42	49.79	14.17
2 - 3	28	24.35	69.62	20.01	37	29.84	89.73	25.53
3 - 4	16	13.91	57.11	16.41	12	9.68	42.69	12.15
4 - 5	13	11.30	57.04	16.39	5	4.03	21.85	6.22
5 - 7.5	8	6.96	46.71	13.42	14	11.29	83.58	23.78
7.5 - 10	6	5.22	52.04	14.95	6	4.84	55.04	15.67
10 & above	2	1.74	23.22	6.67	-	-	-	-
Total	115	100.00	348.02	100.00	124	100.00	351.41	100.00
			3.03	11.61				2.83

size of operational holding in the different size-groups are observed between 1980 and 1987. But these variations are not so significant over a period of 7 years.

3.4. Area under operation and land-man ratio by size group of operational holding is shown in Table 3.5. Land-man ratio in the different operational size-groups has not differed much in 1987 from those in 1980. Land-man ratio has declined in 1987 in the size-groups of 2.0 - 3.0, 5.0 - 7.5 and 7.5 - 10.0 hectares; though decline is more prominent only in the latter two groups. The only size group in which land man ratio has increased to 0.36 in 1987 from 0.35 in 1980, is the 4.0 - 5.0 hectares. But on the whole, land-man ratio for the village has been reduced to 0.29 in 1987 from 0.33 in 1980. This implies that there has been an underutilisation of available man-power in the agricultural sector in the village.

3.5. The cumulative distribution of ownership holdings is shown in Table 3.6. The inequality in distribution of ownership holdings remained almost the same in the village in the years of first point survey and resurvey. Households in the smaller size-groups had very small ownership holdings which had been utilised for homestead, cultivation of crops and other uses. As a result of this, the farmers have to seek for leased in land in the vicinity of the village; but that is also not available according to requirements. So the people has to take resort to other vocations like petty trades, etc. for their livelihood.

3.6. The cumulative distribution of operational holdings by operational size-group is presented in Table 3.7 for 1980 and 1987. The number of households without operational holding has reduced to 3 in 1987 from 4 in 1980. These households either do not have cultivable land or they have leased out their land because of small and uneconomic sizes.

3.7. The distribution of area under operation by different types of cultivating households is shown in Table 3.8. The percentage of households cultivating only owned land to total households has been reduced to 70.25 in 1987 from 77.48 in 1980. There has been reduction of 50 hectares of operational land for the owner cultivators during the resurvey. On the other hand, percentages of households and area operated by the mixed tenant group (i.e. cultivating owned land as well as leased in land)

Table 3.5

Area under operation and land-man ratio by size group of operational holding : Nam-Deuri: 1980 & 1987.

Size group of holding (Hect.)	1980				1987			
	No. of H.H.	No. of persons	Total operational holding	Land-man Ratio	No. of H.H.	No. of Persons	Total operational holding	Land-man ratio.
Landless	4	22	-	-	3	15	-	-
Below 1 hect.	15	88	10.35	0.11	13	78	8.73	0.11
1 - 2	23	180	31.93	0.18	34	279	49.79	0.18
2 - 3	28	245	69.62	0.28	37	384	89.73	0.23
3 - 4	16	160	57.11	0.36	12	122	42.69	0.35
4 - 5	13	162	57.04	0.35	5	60	21.85	0.36
5 - 7.5	8	85	46.71	0.55	14	177	83.58	0.42
7.5 - 10	6	92	52.04	0.57	6	116	55.04	0.47
10 & above	2	31	23.22	0.75	-	-	-	-
Total	115	1065	348.02	0.33	124	1231	351.41	0.29

Table 3.6

Cumulative Distribution of Ownership Holdings by size group of operational holdings : Nam-Deuri: 1980 & 1987.

Size Group of operational holdings (Hect.)	1980				1987					
	No. of H.H.	Cumulative Total of H.H.	Cumulative percentage of Total H.H.	Cumulative total area owned	No. of H.H.	Cumulative Total of H.H.	Cumulative percentage of total H.H.	Total Area Owned	Cumulative percentage of area owned	Percentages of cumulative area
Landless	4	4	3.48	2.57	3	3	2.42	1.10	1.10	0.31
Below 1 hect.	15	19	16.52	12.37	13	16	12.90	10.93	12.03	3.35
1 - 2	23	42	36.52	32.48	34	50	40.32	52.35	64.38	17.92
2 - 3	28	70	60.87	80.11	37	87	70.16	94.90	159.28	44.33
3 - 4	16	86	74.78	69.19	12	99	79.84	47.01	206.29	57.41
4 - 5	13	99	86.08	65.54	5	104	83.87	20.10	226.39	63.00
5 - 7.5	8	107	93.04	48.10	14	118	95.16	79.38	305.77	85.09
7.5 - 10	6	113	98.26	57.38	6	124	100.00	53.55	359.32	100.00
10 & above	2	115	100.00	32.27	-	-	-	-	-	-
Total :	115			400.01	124			359.32		

Table 3.7

Cumulative Distribution of Operational holdings by size group of operational holdings: N. S. Deuri, 1980 & 1987.

Size Group of operational holdings. (Hect.)	1980				1987			
	No. of H.	Cumulative Total of H.H.	Cumulative Percentages of total H.H.	Total Operational Area	Total Operational Area	Cumulative Percentages of total H.H.	Cumulative total area	Cumulative percentage of total area
Landless	4	4	3.48	-	-	2.42	-	-
Below 1 hect.	15	19	16.52	10.35	2.97	12.90	8.73	2.48
1 - 2	23	42	36.52	42.28	12.15	40.32	49.79	16.65
2 - 3	28	70	60.87	111.90	32.15	70.16	89.73	42.19
3 - 4	16	86	74.78	169.01	48.56	79.84	42.69	54.33
4 - 5	13	99	86.08	226.05	64.95	83.87	21.85	60.55
5 - 7.5	8	107	93.04	272.76	78.37	95.16	83.58	84.34
7.5 - 10	6	113	98.26	324.80	93.33	100.00	55.04	100.00
10 & above	2	115	100.00	348.02	100.00	-	-	-
Total :	115			348.02			351.41	

124

348.02

115

351.41

Table 3.8

Area under cultivation operated by different types of cultivator families by interest in land: Nam-Deuri: 1980 & 1987.

Particulars	1980			1987				
	No. of H.H.	%	Total area in hectare	Average size of holdings	No. of H.H.	%	Total area in hectare	Average size of holdings
All Cultivating Households.	111	100.00	348.02	3.13	121	100.00	351.41	2.90
Owned holdings	86	77.48	272.37	3.17	85	70.25	220.20	2.59
Pure Tenancy	1	0.90	1.21	1.21	1	0.83	0.81	0.81
Mixed Tenancy	24	21.62	74.44	3.10	35	28.92	130.40	3.73

Table 3.9

Concentration of owned operational holdings according to size Groups.
 Nam-Deuri : 1980 and 1987.

Size Group of operational holding (in hect)	1980				1987			
	No. of H.H.	Total land under operation	Owned rational holding	% of owned operational holding to operational area	No. of H.H.	Total land under operation	Owned operational holding.	% of owned operational holding to operational area
Landless	4	-	-	-	3	-	-	-
Below 1 hect.	15	10.35	9.67	93.43	13	8.73	7.25	83.05
1 - 2	23	31.93	26.12	81.80	34	49.79	44.53	89.44
2 - 3	28	69.62	65.70	94.37	37	89.73	85.41	95.13
3 - 4	16	57.11	55.62	97.39	12	42.69	40.13	94.00
4 - 5	13	57.04	55.02	97.16	5	21.85	17.27	79.04
5 - 7.5	8	46.71	40.77	87.28	14	83.58	73.06	87.41
7.5 - 10	6	52.04	49.24	94.81	6	55.04	49.64	93.59
10 and above	2	23.22	23.22	100.00	-	-	-	-
Total :	115	348.02	325.86	93.63	124	351.41	317.29	90.29

have increased in 1987 over 1980. The reduction of area under operation for the owner cultivators in 1987 is the result of conversion of some of the households to the mixed tenant group for which percentage of area operated also in this group has increased. For the same reason, average size of holding for the owner cultivators reduced to 2.59 hectares in 1987 from 3.17 hectares in 1980.

3.3. It is a common feature in the villages in Assam that most of the farmers are either small or marginal. Some of them depend on leased in land either from big land owners or absentee landlords. But there is acute scarcity of land for lease too. Increase in population has also accelerated the problem of suitable cultivable land in the villages. It is natural that if the major portion of operational holding belongs to rent receiver households the farmer's share of produce would be minimum and this heavily tells upon his economy. The concentration of owned operational holdings according to size-group for Nam-Deuri is shown in Table 3.9. Almost 80 per cent or more of the operated area in different size-groups in Nam-Deuri belongs to the villagers. It indicates that dependence on lease in land is not heavy in the village both in 1980 and 1987. There has not been much variation on this point in both the years. Only in the size groups of below 1.0 hectare and 4.0-5.0 hectares percentages of owned operational land have declined considerably. In other size-groups variation between the two years on percentage of owned operational holding to total is nominal.

4. Livestock Population :

4.1. Possession of livestock is very important for a farming community. Besides helping in crop cultivation it helps the farmers to enhance their economy to a great extent. Table 3.10 shows the distribution of livestock population owned by the people of Nam-Deuri in the year of first point survey and in the year of resurvey.

4.2. Among the Deuri community pigs, goats, fowls and ducks are considered as the properties of the womenfolk. The entire sale-proceeds of these animals are exclusive income of the womenfolk. There has been increase in the population of goats, fowls, ducks and pigeons in 1987. But inspite of increase in

Table 3.10

Ownership of Livestock Population by Size Group of Operational Holding
 Nam-Deuri : 1980 and 1987.

Size Group (In hect.)	1980										1987											
	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.	X No. of H. H.		
Landless	4	1	-	2	6	3	2	-	-	-	3	2	-	-	2	5	2	13	2	-	-	
Below 1 hect.	15	20	12	-	4	14	52	2	2	-	13	22	25	-	-	5	11	41	3	5	-	
1 - 2	23	46	23	-	20	28	153	36	5	-	34	60	47	-	-	31	39	207	42	13	-	
2 - 3	28	81	166	4	40	42	267	33	-	-	37	98	232	-	10	56	59	342	41	16	-	
3 - 4	16	94	124	4	57	76	381	20	6	-	12	68	108	-	5	14	44	53	302	21	18	
4 - 5	13	69	93	4	20	36	120	81	0	-	5	28	38	-	2	4	11	13	52	3	6	
5 - 7.5	8	32	59	6	29	17	112	15	2	-	14	62	122	-	8	3	48	24	178	39	8	
7.5 - 10	6	42	107	10	14	40	71	21	0	-	6	46	118	-	9	4	12	46	84	9	16	
10 and above	2	16	72	2	7	65	10	11	1	-	-	-	-	-	-	-	-	-	-	-	2	
Total :	115	401	656	30	197	321	1168	127	35	2	124	386	690	37	32	212	247	1219	160	82	2	33

number of households, a decline in pig population is found in 1987. Rearing pig is popular in the village as it fetches good income because of its high cost in recent years. The decline in pig population was due to an epidemic disease that broke out in the village before two years of the resurvey.

4.3. Draught animals are very important for a village whose economy mainly depends on agriculture. Bullocks and he-buffaloes are the main draught animals in Nam-Deuri gaon. Some times, of course, she-buffaloes in the waning stage are also used for drawing ploughs. There has been a decline in the bullock population in 1987. But this has been compensated by the use of she-buffaloes and horses as draught animal. The introduction of horses as draught animals is a recent phenomenon in the village. There was no horse in the village in 1980; but in 1987, 33 horses were found in the village.

5. Agricultural Tools and Implements :

5.1. Agricultural tools and implements are very important assets for a farming community. Production, to a great extent, depends on the quality and efficiency of the tools and implements used by the farmers. Table 3.11 shows the number of tools and implements in use in the village. The number of tools and implements has slightly increased in 1987 than those in 1980 with the exception that the number of Desi plough has declined marginally in 1987 from those in 1980. There was only one power tiller in the village in 1980 which was sold before the resurvey. But two other households have procured two new power tillers during the intervening period and these have been found to be in use. But some of the farmers who cannot afford to have a power tiller expressed their desire to use tractor for ploughing if they get it on hired basis. This desire of the farmers get more importance in view of the high cost of draught animals.

5.2. It has been mentioned earlier that Nam-Deurigaon is situated in a flood-prone area. Even then the village sometimes suffers from scarcity of water even for winter paddy crop. So, the people felt the need of irrigation in their fields. There were two diesel pump-sets in the village in 1980 and the number of such pump-sets rose to 14 in 1987. ^B But it is learnt that pump sets have not been properly utilised. In most of the cases pump-sets are used only for irrigating the seed-beds of Sali paddy. Some of the households use the pump-sets for other purposes like dehusking paddy, etc.

Table 3.11.

Agricultural Tools and Implements in use by size group of operational holding : Nam-Deuri : 1980 and 1987

Size Group	1980										1987													
	No. of Plough	No. of Sickle	No. of Spade/Hoe	No. of Harrow	No. of Other	No. of Plough	No. of Sickle	No. of Spade/Hoe	No. of Harrow	No. of Plough	No. of Sickle	No. of Spade/Hoe	No. of Harrow	No. of Plough	No. of Sickle	No. of Spade/Hoe	No. of Harrow	No. of Plough	No. of Sickle	No. of Spade/Hoe	No. of Harrow	Power/ Diesel Pump		
	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	Val. in Rupees	
Landless	4	-	-	-	3	205	3	-	-	2	38	6	30	-	-	-	-	-	-	-	-	-	-	
Below 1 hect.	15	13	520	22	352	32	96	-	2	20	-	-	-	14	1210	13	14	672	14	332	28	142	1	
1 - 2	23	41	1640	43	731	60	180	2	10	18	180	-	27	2040	34	79	3792	701	672	87	440	2	34	
2 - 3	28	64	2560	66	1122	116	348	5	2000	27	270	-	46	2595	37	85	4080	821	986	152	748	7	37	
3 - 4	16	48	1920	55	935	80	240	6	2300	20	200	-	26	1555	12	38	1824	41	996	64	316	6	12	
4 - 5	13	49	1960	50	850	64	172	4	1600	16	160	-	19	1340	5	11	528	16	364	24	124	5	7	
5 - 7.5	8	33	1320	31	527	53	159	6	2300	10	100	-	13	140	14	32	1536	581	404	88	436	10	20	
7.5 - 10	6	34	1360	34	578	40	120	4	1550	12	120	1	16	755	6	14	672	37	902	42	206	-	13	
10 and above	2	6	240	6	102	8	24	-	-	2	20	1	1	10	-	-	-	-	-	-	-	-	-	20
Total :	115	288	11520	307	5197	4581	3742	7107	50107	1070	2165	10450	12427	31043	207694	491	2442	31	129	2390	16	-	-	129

5.3. Altogether 7 (seven) diesel operated shallow tube-wells were found to be in use in the village at the time of the resurvey. These shallow tube-wells are used, as and when necessary, by those farmers whose farms are located near the shallow tube-wells. The expenditure of diesel is borne by the individual farming family and it is reported that they have learnt the process of operation of the shallow tube-wells. Though electricity has been extended to the village, it has not yet been extended to any of the shallow tube-wells.

5.4. It is observed that some of the households use their individual tube-wells for watering the Rabi crops particularly vegetables. These households have installed their tube-wells in such convenient places so that the tube-wells can be used for both drinking water purpose as well as irrigating the vegetables gardens.

6. Durable Consumer Goods :

6.1. Table 3.12 shows the number of durable consumer goods in use in Nam-Deuri gaon. The type of durable consumer goods that are used by a group of people indicates the economic condition of the people to a great extent. The use of radio/

Table 3.12

Durable Consumer Goods in Use, Nam-Deuri,
1980 and 1987.

Items	1980		1987	
	No. of H.H.	Nos. in use	No. of H.H.	Nos. in use
Radio/Transistor	17	17	21	22
Sewing Machine	15	15	17	17
Bi-cycle	38	75	96	127
Gun/Pistol	6	6	8	8
Motorcycle/Scooter	3	3	6	6
Watch/Clock	20	30	36	78
Torch	61	71	78	92
Lantern	115	200	124	235
Patromax	17	20	26	31
Table	36	64	54	87
Chair	44	121	57	135
Almirah	16	33	25	46
Umbrella	45	77	58	94
Buckets	115	300	124	314
Boxes	46	182	52	203
Brass Metal Vessels	15	232	23	288
Bell Metal Vessels	108	1658	116	1782
Aluminium Vessels	76	142	87	160
Cots	25	60	38	93
Fishing Net	35	40	40	43
Chinese Pottery	3	12	16	72
Handloom	113	179	105	221

transistor, sewing machine, bi-cycle, scooter/motor cycle, chinese cockery, etc., are simple indicators of economic change as well as acceptance of urban way of life. Possession of a gun is, of course, a prestige symbol in a tribal society. Easy communication from the village to Jorhat town and spread of education have helped the villagers, particularly the young generation to acquire some modern consumer durable good. Increase in number of radio/transistor, bi-cycle, motor cycle/scooter, etc. in 1987 over 1980 has amply support this view.

7. Cottage Industry :

7.1. All women of Deuri community like other Assamese women are expert weavers. Most of their clothings as well as some dresses for menfolk are prepared at their family looms. The Deuri women have realised the benefits of fly-shuttle looms (improved looms) over traditional looms.

7.2. Table 3.13 shows the number of looms by types that are in use in Nam-Deuri gaon. The number of fly-shuttle

Table 3.13

Number of Households and Possession of Handlooms
by Types : Nam-Deuri : 1980 & 1987.

Types of Looms	1980		1987	
	No. of H.H.	No. of Looms	No. of H.H.	No. of Looms
Improved Looms (Fly-Shuttle)	34	47	68	118
Traditional Looms (Throw-Shuttle)	79	132	67	103
Total :	113	179	105	221

looms has increased to 118 in 1987 from 47 in 1980. This is an increase of 151 per cent in 7 years. This clearly indicates the popularity of the improved loom in the village. Some of the households possess more than one improved loom. This depends on the number of women engaged in weaving. On the other hand, the number of traditional looms has dwindled away in the village. The number has come down to 103 in 1987 from 132 in 1980, i.e. a fall of about 22 per cent in just 7 years.

7.3. Production of endi and silk yarn is another cottage industry of the village. Rearing endi worm or mulberry silk worm is an exclusive part-time job of the women of the village. But a women of the village do not rear endi or silk worms - though most of them know how to rear the worms. Rearing mainly depends on availability of fodder leaves. The concerned women know how to spin the yarns and usually they do the spinning themselves at home in leisure time. The clothes they weave from home produced endi or silk yarn are meant only for family members and not for sale.

7.4. Table 3.14 shows the production of endi and mulberry silk yarns in Nam-Deuri gaon for 1980 and 1987. The number of

Table 3.14

Production of Endi and Silk Yarn : Nam-Deuri,
1980 and 1987.

Types of Yarn	1980			1987		
	No. of H.H.	Production (Kg.)	Estimated Value (Rs.)	No. of N H.H.	Production (Kg.)	Estimated value (Rs.)
Endi	16	12	540.00	24	53.5	6350.00
Silk	5	4	460.00	9	13.0	5200.00

households rearing endi and silk has increased in 1987 and along with it production of yarn has also increased. Rearing of mulberry silk worm was introduced in the village only in the late seventies. Mulberry plants have recently been planted by more families in the village. When the plants will grow properly to give sufficient fodder leaves for the silk worm, it is expected that more families would rear silk worm and derive economic benefit from this cottage industry. However, it is seen from the Table that the number of households rearing endi and silk and the production also have increased in 1987 than those in 1980.

CHAPTER IV

CHANGES IN LEVELS OF INPUTS AND OUTPUTS

I. Introduction :

1.1. In this Chapter the changes in the economic resources and economic activities of the villagers of Nam-Deuri gaon are analysed. The economic resources are mainly confined to land resources, livestock, cottage industries, etc. and hence the activities are mainly related to agriculture and other allied sectors.

2. Agricultural Enterprise :

2.1. Rice is the staple food of the people of Nam-Deuri gaon. So the major portion of the cultivable area of the village is allocated to cultivation of winter paddy (Sali), Summer (Ahu) and Autumn paddy (Bao) are the three varieties of paddy raised in the village. Of these three, sali, the winter paddy occupies the maximum area. A major part of the area under paddy is monocropped. Only a very small part of land is cropped more than once. Crop rotation followed in the double cropped area are Ahu paddy followed by Sali paddy and Sali paddy is followed by peas under relay cropping method. Kharif vegetables like Patal (*trichosanthes dioica*) is followed by Rabi crops. Besides these, the other crops usually grown in the village are Potato, Mustard, Black gram, Jute, Vegetables etc. Patal and Mustard are the commercial crops of the village.

3. Area, Production and Yield :

3.1. The area, production and yield of different crops grown in the village are shown in Table 4.1. The area under Ahu paddy and Bao paddy have declined in 1987 from those in 1980, while area under Sali paddy, the principal paddy crop, has increased. On the whole, total area under paddy has increased by only 8.20 hectares in 1987. Decline in area under Ahu and Bao paddy depends on the production of sali paddy. If production from Sali paddy is quite good and satisfactory, usually the cultivators do not like to take the burden of raising Ahu and Bao paddy. Above all, early rainfall and climatic condition is yet another inducing factor for undertaking early paddy or Ahu cultivation. Bao paddy is cultivated in low lying areas where other crop cultivation is not possible.

Table 4.1.
Area, Production and yield of Principal Crops by Size-group of Operational Holdings, (Area in Hectare, production in quintals and Yield in Kg. per hectare) 1980 & 1987.

Size Group of operational holding (In hect.)	Year	No. of H. H.	Ahu			Sahi			Bao			Patal				
			Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield		
			2	3	4	5	6	7	8	9	10	11	12	13	14	15
Landless	1980	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1987	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Below 1 hec.	1980	15	3.61	46.53	1289	9.62	155.62	1652	112.89	1616	-	-	-	-	-	-
	1987	13	3.51	39.45	1124	6.99	468.73	1764	710.19	1620	0.26	1.12	431	0.91	39.48	4371
1 - 2	1980	23	12.18	135.89	1116	26.57	883.84	1537	1195.90	1603	-	-	-	1.99	135.20	6794
	1987	34	14.64	167.50	1145	43.85	608.78	1472	512.81	1632	1.62	23.10	1389	1.58	86.91	5501
2 - 3	1980	28	17.14	182.05	1062	57.50	703.35	1510	305.75	1637	0.31	1.86	1431	1.10	64.80	5891
	1987	37	20.91	228.25	1092	74.61	305.75	1637	568.93	1577	-	-	-	1.48	78.40	5298
3 - 4	1980	16	15.66	178.25	1139	41.36	703.35	1510	305.75	1637	-	-	-	1.49	90.00	6040
	1987	12	9.17	105.10	1147	31.44	568.93	1577	1172.93	1627	1.34	14.89	1111	0.43	23.62	5494
4 - 5	1980	13	10.84	134.41	1214	46.59	1172.93	1627	562.23	1579	1.21	17.27	1428	1.85	76.22	4120
	1987	5	3.10	35.37	1141	18.68	35.61	932	720.98	1623	-	-	-	1.63	87.60	5275
5 - 7.5	1980	8	7.76	91.60	1180	36.08	44.45	1185	273.64	1649	3.75	61.06	1628	1.27	68.88	5424
	1987	14	11.60	131.56	1135	72.13	16.60	1143	205.75	1627	-	-	-	0.74	40.67	5496
7.5 - 10	1980	6	11.51	107.23	932	35.61	27.55	1143	273.64	1649	-	-	-	0.47	8.90	1894
	1987	6	6.61	78.53	1185	44.45	269.73	1114	4225.15	1566	-	-	-	-	-	-
10 & above	1980	2	2.41	27.55	1143	16.60	292.15	1130	4731.45	1620	5.48	98.93	1440	9.56	505.78	5291
	1987	-	-	-	-	-	-	-	-	-	2.83	40.37	1427	8.61	467.50	5430
Total	1980	115	81.11	903.61	1114	269.73	4225.15	1566	4731.45	1620	5.48	98.93	1440	9.56	505.78	5291
	1987	124	69.54	784.76	1130	292.15	4731.45	1620	4731.45	1620	2.83	40.37	1427	8.61	467.50	5430

Table 4.1.

Area, Production and yield of Principal Crops by Size-group of Operational Holdings, (Area in Hectare, production in quintals and Yield in Kg. per hectare) 1980 & 1987.

Size Group of operational holding (In hect.)	Year	No. of H. H.	Ahlu										Bao			Patal		
			Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	Area	Production	Yield	
55-1	2	3	4	5	6	7	8	9	10	11	12	13	14	15				
Landless	1980	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	1987	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Below 1 hec.	1980	15	3.61	46.53	1289	9.62	155.62	1652	-	-	-	-	-	-	-	-	-	
	1987	13	3.51	39.45	1124	6.99	112.89	1616	-	-	-	0.48	22.00	4583	-	-	-	
1 - 2	1980	23	12.18	135.89	1116	26.57	468.73	1764	0.26	1.12	431	0.91	39.48	4371	-	-	-	
	1987	34	14.64	167.50	1145	43.85	710.19	1620	-	-	-	2.05	111.85	5457	-	-	-	
2 - 3	1980	28	17.14	182.05	1052	57.50	883.84	1537	-	-	-	1.99	135.20	6794	-	-	-	
	1987	37	20.91	228.25	1092	74.61	1195.90	1603	1.62	23.10	1389	1.58	86.91	5501	-	-	-	
3 - 4	1980	16	15.66	178.25	1139	41.36	608.78	1472	0.31	1.86	1431	1.10	64.80	5891	-	-	-	
	1987	12	9.17	105.10	1147	31.44	512.81	1632	-	-	-	1.48	78.40	5298	-	-	-	
4 - 5	1980	13	10.84	134.41	1214	46.59	703.35	1510	-	-	-	1.49	90.00	6040	-	-	-	
	1987	5	3.10	35.37	1141	18.68	305.75	1637	-	-	-	0.43	23.62	5494	-	-	-	
5 - 7.5	1980	8	7.76	91.60	1180	36.08	568.93	1577	1.34	14.89	1111	1.85	76.22	4120	-	-	-	
	1987	14	11.60	131.56	1135	72.13	1172.93	1627	1.21	17.27	1428	1.63	87.60	5275	-	-	-	
7.5 - 10	1980	6	11.51	107.23	932	35.61	562.23	1579	3.75	61.06	1628	1.27	68.88	5424	-	-	-	
	1987	6	6.61	78.53	1189	44.45	720.98	1623	-	-	-	0.74	40.67	5496	-	-	-	
10 & above	1980	2	2.41	27.55	1143	16.60	273.64	1649	-	-	-	0.47	8.90	1894	-	-	-	
	1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	1980	115	81.11	903.61	1114	269.73	4225.15	1566	5.48	98.93	1440	9.56	505.78	5291	-	-	-	
	1987	124	69.54	784.76	1130	292.15	4731.45	1620	2.83	40.37	1427	8.61	467.50	5430	-	-	-	

Table 4.1 (Contd.)

Area, Production and Yield of Principal crops by size group of Operational Holdings, (Area in Hectare, Production in Quintals, Yield in Kg. per hectare) 1980 & 1987.

Size group of operational holding (In hect)	Year	Potato		Mustard		Matikalai		Peas						
		Area	Production	Area	Production	Area	Production	Area	Production					
		3	4	5	6	7	8	9	10	11	12	13	14	15
Landless	1980	4	-	-	-	-	-	-	-	-	-	-	-	-
	1987	3	-	-	-	-	-	-	-	-	-	-	-	-
Below 1 hect.	1980	15	0.07	2.61	3729	0.13	1.88	1446	0.26	0.74	285	-	-	-
	1987	13	-	-	-	0.78	7.85	101	0.40	1.12	281	-	-	-
1 - 2	1980	23	0.23	4.47	1943	1.54	9.49	616	0.74	4.65	628	0.54	4.72	874
	1987	34	0.77	17.75	2306	2.97	29.72	101	0.81	2.30	285	-	-	-
2 - 3	1980	28	0.23	3.42	1487	6.18	22.45	363	1.67	5.70	341	1.62	14.36	886
	1987	37	0.70	16.10	2301	6.64	66.50	101	1.21	3.35	277	0.33	3.00	909
3 - 4	1980	16	0.47	11.91	2534	7.50	41.70	556	4.00	9.12	228	0.17	2.00	1176
	1987	12	0.40	8.95	2238	7.38	71.90	975	3.78	11.50	305	-	-	49
4 - 5	1980	13	0.52	13.40	2577	4.68	217.82	4654	0.46	3.35	728	0.13	1.50	1154
	1987	5	0.11	2.65	1410	3.60	36.15	101	0.54	1.55	288	0.13	1.25	962
5 - 7.5	1980	8	0.52	7.07	1360	4.55	13.22	291	1.27	2.98	235	0.40	2.50	625
	1987	14	1.55	35.83	2312	6.21	61.50	991	1.21	3.43	284	2.70	24.85	920
7.5 - 10	1980	6	0.86	18.43	2143	9.44	51.76	548	2.14	2.42	213	-	-	-
	1987	6	1.69	38.97	2306	8.91	88.35	992	2.09	5.90	283	-	-	-
10 & above	1980	2	0.21	10.43	4967	3.61	10.80	299	1.74	5.21	299	-	-	-
	1987	-	-	-	-	-	-	-	-	-	-	-	-	-
Total :	1980	115	3.11	71.74	2307	37.63	369.12	981	12.28	34.17	278	1.03	9.00	874
	1987	124	5.22	102.25	1959	36.49	361.97	992	10.04	29.15	291	6.10	55.08	903

Table: 4.1. (Contd.)

Area, Production and Yield of Principal crops by size group of Operational Holdings, (Area in Hectare, Production in Quintals, Yield in Kg. per hectare) 1980 & 1987.

Size group of operational holdings (In hectare)	Year	No. of H.	JUTE			VEGETABLES			TOBACCO			WHEAT			
			Area	Production	Yield	Area	Production (In Rs. terms of for 1987)	Yield	Area	Production	Yield	Area	Production	Yield	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Landless	1980	4	-	-	-	-	-	-	-	-	-	-	-	-	-
	1987	3	-	-	-	-	-	-	-	-	-	-	-	-	-
Below 1 hect	1980	15	-	-	-	0.45	1.80	444	-	-	-	-	-	-	-
	1987	13	0.16	1.71	1059	0.50	2000.00	4000	-	-	-	-	-	-	-
1 - 2 hect.	1980	23	-	-	-	0.86	2.25	262	-	-	-	-	-	-	-
	1987	34	0.09	1.05	1167	1.21	4815.00	3980	-	0.01	0.05	500	0.02	0.24	1200
2 - 3 hect.	1980	28	0.03	0.36	1200	0.86	2.25	262	-	-	-	-	-	-	-
	1987	37	0.27	2.87	1053	0.94	3642.00	3875	-	0.03	0.18	600	0.67*	7.96	1189
3 - 4 hect.	1980	16	0.19	2.05	1079	0.32	1.00	313	-	0.03	0.10	333	0.20	N.A	-
	1987	12	-	-	-	0.33	1450.00	4394	-	0.03	0.16	534	-	-	-
4 - 5 hect.	1980	13	-	-	-	0.95	2.90	305	-	0.01	0.10	1000	-	-	-
	1987	5	-	-	-	1.08	4118.00	3813	-	0.07	0.39	558	-	-	-
5 - 7.5 hec	1980	8	-	-	-	0.26	1.25	481	-	-	-	-	-	-	-
	1987	14	0.06	0.65	1084	0.54	2127.00	3939	-	0.13	0.68	524	-	-	-
7.5 - 10 hec.	1980	6	-	-	-	0.60	2.40	400	-	-	-	-	-	-	-
	1987	6	0.13	1.42	1093	0.67	2567.00	3832	-	-	-	-	0.26	3.30	1270
10 & above	1980	2	-	-	-	0.26	1.30	500	-	-	-	-	-	-	-
	1987	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	1980	115	0.22	2.41	1095	4.56	15.20	338	0.04	0.20	0.20	500	0.20	N.A	-
	1987	124	0.71	7.70	1085	5.27	20719.00	3932	0.27	1.46	0.95	541	0.95	11.50	1211

3.2. Yield of crops in the village depends on rainfall, climatic and other independently variable factors. As there is no irrigation system and the available pumpsets are used primarily for watering seed beds as the water sources to lift by using pumpsets are very limited. So, very negligible part of the total cropped area is irrigated. Crop cultivation in general and major crop Sali paddy production mainly depends on rainfall. Moreover, the village is flood prone as it is adjacent to the mighty river Brahmaputra. Sometimes flood damages the entire standing crop of the village. Interculture and other scientific intermitant operations are not usually done by the villagers in any crop except Patal cultivation which brings them good cash income.

3.3. Though there is a fall in area under Ahu (summer) paddy, yield rate of this crop has increased slightly in 1987 whereas both area and yield rate in the case of Bao (Autumn) paddy have come down. On the other hand, increase in area under Sali (Winter) paddy and its yield rate in 1987 over 1980 are fairly higher, though not very encouraging. Farmers in the size groups of 2 hectares and above have been able to raise yield rate of sali paddy in 1987 over 1980. But in the case of Ahu and Bao paddy, it is seen that the size-group of operational holding has no relation either with increase or decline in yield rate.

3.4. Patal (a kind of summer vegetable) is cultivated by the villagers with all care rather on a commercial basis as it fetches good cash. Area under Patal cultivation has slightly declined in 1987; but its yield rate has been raised considerably. This is perhaps, because of the fact that due to laborious inter-culture like weeding and management required in Patal cultivation, the farmers have intentionally cut down their size of Patal farms. But the cultivation of this crop appears to be popular amongst all categories of farmers; all the potential areas are used for cultivation of this crop.

3.5. Area under Potato, Matikalai (Black gram), Pea, Jute, Vegetables, Tobacco and Wheat has increased in 1987 over 1980 whereas area under Mustard has declined. The yield rate of all the above mentioned crops except potato and jute have been found to have increased. But the rise in yield rate of these crops over a period of 7 years cannot be said to be satisfactory. Yield rate of wheat could not be compared because of non-availability of yield rate for the first point survey. Wheat cultivation is not indigenous in this part of the country. So, adoption of such a new crop in a tribal village

brings new hope because in flood prone areas it can be cultivated in winter season even if there is flood in the summer crop cultivation period. The loss incurred due to successive waves of flood may be significantly substantiated and provided substitute food item to the affected people. It may be opined from the observation that after floods, when the standing paddy crop is damaged the State Govt. introduced alternative crop i.e. wheat as one of the crops in the area. So, wheat crop is found to be cultivated in the village at the time of resurvey.

4. Land Utilization Pattern in the Village :

4.1. The land utilization pattern in the village is shown in Table 4.2. The percentage of area sown more than once to net area sown was 24.68 in 1987 as against 21.94 in 1980. This has shown that crop intensity has slightly increased to 124.69 per cent in 1980 from 121.94 per cent in 1987. The per capita net cultivated area has reduced substantially to 0.29 hectare in 1987 as compared to 0.33 hectare in 1980. The fall in per capita net cultivated area is obviously because of increase in population in the village.

Table 4.2

Land Utilisation pattern in the village
Nam-Deuri : 1980 & 1987

(Area in hectare)

Particulars	1980	1987
Net area sown	348.02	351.41
Area sown more than once	76.37	86.77
Gross cropped area	424.39	438.18
Per capita net cultivated area	0.33	0.29
Area sown more than once as % of net area sown	21.94	24.69
Crop Intensity	121.94%	124.69%

4.2. Crop wise area, output and value of crops for the village for 1980 and 1987 are shown in Table 4.3. Both in 1980 and 1987 paddy covered maximum of the cropped area of the village and hence maximum amount of income. Though there was only 2.3 per cent rise in area under paddy, the increase in production was worked out to be 6.7 per cent. Next to paddy, Patal is

Table 4.3

Cropwise Area in hectares, Output in Quintals and Value in Rupees Nam-Dauri: 1980 & 1987.

Name of Crops	1980			1987			Percentage variation (1980-1987)
	Area in hectare	Output in Quintals	Value in Rs.	Area in hectare	Output in Quintals	Value in Rs.	
1. Sali Paddy	269.73	4225.15	415515	292.19	4731.45	756960	8.32
2. Ahu "	81.11	903.61	90009	69.58	785.76	102136	14.26
3. Bao "	5.48	78.93	7893	2.83	40.37	4956	52.00
(Total) Paddy	356.32	5207.69	51347	364.52	5557.58	864052	2.31
4. Patal	9.56	505.78	119920	8.61	467.50	116805	9.94
5. Potato	3.11	71.74	9005	5.22	120.25	20462	67.85
6. Mustard.	37.63	359.12	91275	35.49	361.97	101350	3.30
7. Matikalai.	12.28	34.17	8542	10.04	29.15	11531	18.25
8. Pea	1.03	9.00	1800	6.10	55.08	12398	492.24
9. Jute	0.22	2.41	602	0.71	7.70	2002	222.73
10. Tobacco (Green)	0.04	0.20	30	0.27	1.46	584	5.76
11. Wheat	0.20	N.A.	-	0.95	11.50	2185	375.00
12. Vegetables	4.56	15.40	14420	5.27	N.A.	20719	15.57
Sub-Total: Field Crop	424.95	6215.51	759011	434.18	6612.19	1152088	3.12
Horticultural Crops	N.A.	N.A.	13925	N.A.	N.A.	18272	-
TOTAL	424.95	6215.51	772936	438.18	6612.19	1170360	3.11
							5.38

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the crop which brought to the villagers substantial income although there was a fall in area under the crop by 9.9 per cent in 1987, the consequent fall in production of Patal was only 7.6 per cent which means that per hectare yield has slightly improved. Mustard is the third important crop in the village from income point of view. In the case of mustard also there was a marginal fall in area in 1987, but income from it in terms of value has increased. Both Patal and mustard are grown by the villagers with commercial motive.

4.3. Area under matikalai (black gram) fell in 1987 from that in 1980, but area under pea increased considerably during the period. Pea is proved to be a profitable crop in the village because it is raised with the minimum labour as it is grown under relay cropping method in the Sali (winter) paddy area. Though other crops like jute, tobacco and wheat can bring more income to the farmers, the area allocated to these crops are negligible in aggregate both in 1980 and 1987. Only wheat is the new crop introduced in the village and its area has substantially increased in 1987 that before. Vegetables other than Patal and peas are grown by the villagers mainly for home consumption, only the surplus produced are marketed and thus has little importance from commercial point of view.

4.4. Patal and mustard are the two main crops which can be cultivated on commercial basis for better income in the village. But here the main constraint is scarcity of sufficient suitable land in the area and maximum requirement of labour particularly in intercultural and weeding operations in patal cultivation.

4.5. Table 4.4 shows the production and value from horticulture and forest products for the village. The horticultural crops raised by the villagers of Nam-Deuri gaon are mainly arecanut, lemon and betal leaf. Betal leaf plants are easily damaged by floods. Hence, they do not favour the idea of raising betal leaf plants. As horticultural crops are grown by the villagers primarily in their homestead area, the area exactly under horticultural plants could not be ascertained. So is the case with forest products. Income from forest products are mainly derived from Simalu-tula (silk cotton) and thatch grown in the uncultivated land of some villagers.

Table 4.4

Production in value (Rs.) from Horticulture and Forest
by Size-Group Nam-Deuri : 1980 and 1987

Size Group (in hect.)	1980		1987	
	Horticul- ture	Forest	Horticul- culture	Forest
Land less	360.00	--	--	--
Below 1 hect	800.00	--	513.00	--
1 to 2 "	1,590.00	2,085.00	1,610.00	3,450.00
2 to 3 "	1,120.00	1,680.00	5,921.00	10,530.00
3 to 4 "	810.00	1,650.00	1,240.00	750.00
4 to 5 "	6,610.00	3,930.00	1,090.00	--
5 to 7.5"	1,370.00	1,570.00	4,376.00	1,280.00
7.5 to 10"	765.00	4,750.00	3,022.00	600.00
10 & above	500.00	750.00	--	--
Total :	13,925.00	16,465.00	18,272.00	28,130.00

4.5. The study reveals that only nominal change in cropping pattern have been taking place. Wheat is the only new crop introduced in the village. The area under peas has increased. At the time of resurvey seven shallow tube wells were installed. Two households purchased two power tillers at 50 per cent subsidised rate. The farmers are now using more horses for ploughing which are proved to be more efficient than bullocks. With proper guidance from the extension agencies there is ample scope in agricultural development in the village.

5. Employment in Agriculture :

5.1. Agriculture is the most important source of employment for the villagers of Nam-Deuri gaon. Both male and female adult persons of every cultivating household are engaged in various agricultural operations. The family labours include the full time family workers and the helpers also. Students and old persons, who help the full-time family labours from time to time particularturally in agricultural season are termed as helpers. Besides family labours, some households having insufficient family labours or having large operational holdings engage hired labours. Hired labours are of two categories viz.

'i' casually hired labours and 'ii' periodically hired workers or permanently hired workers. The casual labours are engaged as and when necessary on daily wage basis. These labours are employed on cash or kind wage plus perquisite of one meal. But the periodic labours are engaged either for 3 months or for the whole year and they are to stay with the employer household. During their stay they are provided with necessary clothings, meals, etc., like a family member. Their wage is contracted either for the whole period on lump-sum basis or on monthly basis.

5.2. Table 4.5 shows the distribution of workers engaged in agricultural work according to farm-size. In 1937, 679 workers were engaged in agriculture in the village. Of these workers, 94.35 per cent are family workers. The corresponding figure for 1930 was 96.35 per cent. The decline in the number of total workers in 1937 which was 533 in 1930 is the result of fall in the number of helpers in that year as many of the students stopped going to field. As a result, the total number of male workers also came down to 325 in 1937 from 344 in 1930. The number of family workers reduced in 1937 also because of emigration of 4 family from the village. The number of permanently hired workers has almost remained same. But the number of casually employed labours has increased by 9 per cent in 1937 over 1930.

5.3. In 1930 only the farmers having comparatively larger farms of 4.0 hectares and above employed hired workers. But it is found that in 1937 some households even with small holdings have engaged hired labours. The factors responsible for this change are 'i' some households employed hired workers to look after their cattle, 'ii' some others, even though they are owner of small holdings employed hired labour for shortage of family labours, 'iii' as the cultivable area has to be prepared in a short time after floods, the families with shortage of family labour engage hired workers although they are small farmers. So, the monopoly of engaging hired labour only by the comparatively bigger farmers is not found in 1937. Rather this group of farmers have become self-dependant than before as they are depending less on hired workers.

Table 4.5

Distribution of workers engaged in Agricultural work by farm size groups Mam-Deurri: 1980 & 1987.

Size Groups (In hectares)	1980										1987											
	No. Family worker of Worker		Holder		Casually Hired Worker		Permanently hired worker		Total Worker		No. Family Worker of Worker		Worker Helper		Casually hired Worker		Permanently hired Worker		Total Worker			
	H.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	H.	M.	F.	M.	F.	M.	F.	M.	F.		
Landless	4	-	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	2	3	
Below 1 hect.	15	17	19	3	6	-	-	-	-	20	25	13	18	22	5	4	-	-	25	26		
1 - 2	23	46	48	14	15	-	-	-	-	60	63	34	48	56	13	13	1	-	54	59		
2 - 3	28	52	49	20	18	-	-	-	-	72	67	37	87	111	14	10	2	-	104	125		
3 - 4	16	42	46	17	20	-	-	-	-	59	56	12	25	22	3	5	1	-	33	28		
4 - 5	13	40	36	15	13	2	1	2	-	60	50	5	6	12	4	5	-	-	10	17		
5 - 7.5	8	24	25	5	9	2	3	-	-	32	37	14	40	34	12	5	5	-	51	47		
7.5 - 10	5	19	21	5	4	-	1	1	-	28	25	6	23	32	2	5	-	-	25	38		
10 & above	2	4	8	1	-	1	2	7	-	13	10	-	-	-	-	-	-	-	-	-		
Total	115	224	252	82	85	5	7	13	-	344	344	124	249	292	53	50	9	12	14	-	325	354

Table 4.6

Income of the Agricultural Labourer by Category and Sex : Nam-Deuri : 1980 and 1987.

Category of hired labourer	Sex	1980		1987	
		No. of days.	Total Wages (Rs.)	No. of days.	Total Wages (Rs.)
1. Permanently hired.	M	13	3,495	14	4,265
	F	7	595	10	820
2. Casually hired.	M	5	292	9	540
	F	7	595	10	820
Total :		25	4,382	33	5,625
			16,270		42,250
			650		1,280

Notes: Permanent labourers were generally engaged for 10 months i.e. from April to mid-January. But 3 labourers in 1980 and 4 in 1987 were found to stay with the employer for the whole year.

5.4. Income of the agricultural labours by category and sex for 1980 and 1987 are presented in Table 4.6. The average annual wage for a permanently employed worker has gone up to Rs.2,100 in 1987 from Rs.888 in 1980. Similarly, the average total wage received by male and female casual labour has also increased considerably in 1987. The rise is mainly because of more number of days engaged and higher wage rate prevalent in the area in 1987. Again, higher income of the female workers from casual employment is for the fact they get more opportunity to be engaged as hired labour in transplanting and harvesting in paddy crop.

5.5. It has been mentioned earlier that in Nam-Deuri gaon only two power tillers are in use. So bullock and buffalo are the main draught power for ploughing fields. The number of draught animals has slightly increased in 1987. The increase in the number of draught animals is mainly due to the introduction of horses as a draught animal in the village, although it is used mainly in the Rabi crop season. The distribution of draught power by farm-size group and average area ploughed by draught animal is shown in Table 4.7. The average area ploughed by a pair of draught animal has come down to 0.77 hectare in 1987 from 0.81 hectare in 1980. But the variations in the average area per ploughing draught animal varies from one size-group to another. It varies from 0.40 hectare to 1.10 hectares in 1987 as against from 0.69 hectare to 1.29 hectare in 1980. But this does not actually mean the capacity of a bullock to plough. The use of a pair of bullock or buffalo or horses to its optimum capacity to plough depends on how the draught animals are used by the farmer in the best possible way. It is to be added here that some farmers particularly the small ones hired bullock for ploughing their land as they do not have own bullock or other draught power.

6. Disposal of crops :

6.1. Input in agriculture and residual income are worked out and shown in Table 4.8 according to operational size-groups. Agricultural input in Nam-Deuri gaon includes value of seeds, fertilisers, wages paid to owners of hired draught animals, agricultural labours and rent paid for leased in land. This does not cover the cost of family labour, cost of tools and implements and maintenance cost of draught animals. So,

Table 4.7

Distribution of Draught Power by Farm Size Group :
 Nam-Dauri : 1980 and 1987.

Farm Size Groups (In hecets.)	1980				1987			
	No. of H.H.	No. of bullocks and he-buffaloes	Total Operational holdings (hect.)	Average area per ploughing draught animal (hect.)	No. of H.H.	No. of bullocks he-buffaloes & horses	Total operational holdings (hect)	Average area (ha) per ploughing draught animal
Landless	4	1	--	--	3	2	--	--
Below 1 hect.	15	20	10.46	0.52	13	22	8.73	0.40
1.0 - 2.0	23	46	31.93	0.69	34	66	49.79	0.75
2.0 - 3.0	28	85	69.62	0.82	37	1116	89.73	0.77
3.0 - 4.0	16	98	57.11	0.88	12	80	42.69	0.53
4.0 - 5.0	13	73	57.04	0.78	5	39	21.85	0.56
5.0 - 7.5	8	38	46.71	1.23	14	76	83.58	1.10
7.5 - 10.0	6	52	52.04	1.00	6	55	55.04	1.00
10 & above	2	18	28.22	1.29	--	--	--	--
Total :	115	431	348.02	0.81	124	456	351.41	0.77

Table 4.8.
Utilisation of Agricultural produce in various inputs in production
process and value of sale by farm size group (value in
Rupees) Nam-Deuri 1980 and 1987.

Size group of operation- nal holdings (in hectares)	No. of H.H. total	Value of output	1980						Sub total of inputs	Sale Value	Per H.H. Residual Income.
			Value of Seeds	Value of Fertiliser	Hiring of Bullocks	Wages to hired Ag- ricultural Labour	Rent for Leased in Land.	total of inputs			
Landless	4	--	--	--	--	--	--	--	--	--	
Below 1 hect.	15	29450	2120	--	215	--	1100	3435	55.00	1351.00	
1.0 - 2.0	23	82270	5383	17	80	--	4410	10890	19040	2275.85	
2.0 - 3.0	28	152525	11749	--	--	--	3010	14759	57590	3220.57	
3.0 - 4.0	15	118563	9938	195	--	--	735	10658	43780	3994.59	
4.0 - 5.0	13	130583	9324	--	--	--	--	13974	49150	5195.85	
5.0 - 7.5	8	96345	7481	22	--	--	4000	13253	45288	4725.50	
7.5 - 10.0	5	112220	9123	22	--	--	--	14055	74740	3904.17	
10 & above	2	40880	3282	14	--	--	--	8255	11080	10772.00	
Total	115	772935	59400	270	295	15270	13255	89490	305258	3279.81	

Table 4.8. (Contd.)

Utilisation of Agricultural produce in various inputs in production
 Process and value of sale by farm size group (value in
 Rupees) Nam-Deuri 1980 and 1987.

Locality	Size group of operational holdings. (in hectare)	No. of H.H.	Value of total output	INPUT EXPENDITURE, 1987					Sub total input	Sale Value	Per H.H. Residual Income.
				Value of Seeds	Value of Fertiliser	Hiring of Bulllocks	Wages to Hired Ag- labour	Rent for leased in Land			
	Land less Below 1 hect.	3	38920	--	--	--	--	--	--	--	
	1.0 - 2.0	13	184045	2270	--	1720.00	2400	1800	8190	5875	255.77
	2.0 - 3.0	34	276461	11596	--	4200.00	4689	5800	27285	41395	3393.05
	3.0 - 4.0	37	142953	18370	--	--	4377	5500	39047	87792	4043.84
	4.0 - 5.0	12	75170	9018	--	--	8094	3300	20412	49879	5055.00
	5.0 - 7.5	5	261591	4633	--	--	--	5980	10513	20275	8855.20
	7.5 - 10	14	172938	15680	--	--	17695	13300	45675	108882	7573.83
	10 & above	6	--	10715	--	--	4995	5400	22110	11358	5578.33
Total		124	1152088	72282	--	5920.00	42250	43080	174332	425458	4533.05

Utilisation of Agricultural produce in various inputs in production
 Process and value of sale by farm size group (value in
 Rupees) Nam-Deuri 1980 and 1987.

Table 4.9

Proportion of Expenses on Inputs and Sale to Total Receipts of Crops in Size Groups of Operational Holdings :
 Nam-Dauri : 1980 and 1987.

Size Group of operational holdings	1980				1987			
	Value of product (in Rs.)	P.C. expenses on inputs	P.C. of sale	Value of product (in Rs.)	P.C. expenses on inputs	P.C. of sale		
Landless	--	--	--	--	--	--		
Below 1 hectare	29,450	24.30	20.69	38,920	21.04	17.66		
1.0 - 2.0	82,270	13.24	23.14	1,84,045	14.83	22.49		
2.0 - 3.0	1,62,525	9.08	35.43	2,76,461	14.12	31.75		
3.0 - 4.0	1,18,563	9.17	36.93	1,42,963	14.28	34.89		
4.0 - 5.0	1,30,683	10.69	37.61	75,170	14.12	26.97		
5.0 - 7.5	96,345	13.76	47.01	2,61,591	17.84	41.62		
7.5 - 10.0	1,12,220	12.52	66.60	1,72,938	12.78	64.39		
10.0 & above	40,880	20.20	27.10	--	--	--		
Total :	7,72,936	11.58	39.62	11,52,088	14.19	37.02		

deducting cost of all these inputs as mentioned above from the total value of the produce, the residual income for the households have been calculated. Data on input and output are rough estimates based on information provided by the respondents. No chemical fertiliser was used in the village in 1987 as against some use in 1980. The farmers opined that there is no use of chemical fertiliser as the soil is rich enough for any crop cultivated in the village.

6.2. The average residual income per household from agriculture is found to be Rs.4533 in 1987 as compared to Rs.3279.81 in 1980. It is seen that per household average residual income from cultivation increases along with the increase in farm size upto the size group of 4.00-5.00 hectares. After this, comparatively in bigger farm, average residual income tends to decline with the exception that per household residual income in 1980 in the size group 10 hectares and above was the highest of all. On the whole, both in 1980 and 1987 the average per household residual income in the size groups below 3.0-4.0 hectares is lower than that taking all the households together. The residual income may be taken as return to family labour.

6.3. Table 4.9 shows the proportion to expenses in inputs and the proportion of sale in terms of value for total receipts from different crops. Some households with small farms sell a portion of their paddy not because that they are surplus in paddy, but to meet their day to day requirements of items they could not produce in their farm, Virtually, this may be termed as distress sale on the part of the poor farmers. Salee includes any agricultural produce sold by a household. It obviously includes Patal, Mustard, etc. which are, by and large, grown on commercial basis including paddy and other rabi crops and vegetables grown mainly for home consumption. Only the surplus produce are marketed.

7. Employment in Cottage Industries :

7.1. Weaving is the only household cottage industry worth the name in the village. Almost all the women know how to weave in their looms and they feel proud of it. Besides handloom weaving, rearing of endi and silk worms and spinning is done by some women in the village. The position of employment in cottage industry in Nam-Deuri gaon is shown in Table 4.10.

Table 4.10

Employment in Household Cottage Industries by Age-Group
 Nam-Deuri : 1980 and 1987.

Age-Group	1980			1987		
	Male	Female	Total man- days engaged	Male	Female	Total man- days engaged
10 - 15	--	27	3,375	--	37	4,722
15 - 20	--	69	9,960	--	71	9,820
20 - 25	--	45	6,570	--	70	10,314
25 - 30	1	36	5,040	--	44	6,085
30 - 40	1	56	7,560	--	50	6,708
40 - 50	2	80	3,900	--	35	4,476
50 - 60	--	--	--	--	5	593
Total :	4	263	36,405	--	312	42,718

Table 4.11

Production and Value of Handloom Products :
Nam-Deuri : 1980 and 1987.

Name of Products	1980				1987			
	Output	Value of Yarns (Rs.)	Home produced	Purchased	Output	Value (Rs.)	Home produced	Purchased
Cotton Gamosa (Yiecha)	585	3,510	--	1,020	764	5,870	--	1,706
Cotton Mekhela (Igo)	487	7,305	--	2,557	578	10,716	--	3,752
Cotton Chaddar (Chador)	480	6,720	--	2,395	606	9,908	--	3,894
Cotton Dhoti (Jnko)	439	5,707	--	3,731	511	8,186	--	5,738
Cotton Bed Sheet (Topoy)	13	195	--	156	58	985	--	600
Cotton Shirting (Chola)	3	45	--	25	35	646	--	445
Silk Clothing (Nunce)	10	550	460	200	28	1,960	1,150	--
Endi Wrapper (Aria yee)	8	600	540	--	36	4,500	2,700	--
Others	3	54	--	32	--	--	--	--
Total :	2,028	24,686	1,000	10,116	2,616	42,771	3,850	16,135

Note : All the endi and silk yarns produced at home were not used.

Women availed the available opportunity of employment in cottage industry in the village. As compared to 263 women engaged in Cottage industry in 1980, 312 women were engaged in the vocation in 1987. This increase of women workers may be due to increase in the number of women in working age-group in 1987. But in 1987 no male person in the village was found to be engaged in any cottage industry. In 1980 also only 4 persons were engaged in cottage industry - like Carpentry, Bamboo and Cane work, net (fish) making, etc. Employment in cottage industry has been taken only as a part time job in the off-agricultural season. Because of this, the average man-days per worker engaged in cottage industry has by and large, remained the same.

7.2. The Deuri women weave to meet the requirements of the family. Though some of their products are very fine and of superior quality they hardly sell them. At the time of festivals they like to offer articles like Gamosa (Towel) to their near and dear ones and to the guests of honour. In the case of unmarried girls whatever handloom products remain, after distribution to members of the family according to need, automatically become her personal property. They are allowed to take these handloom products to their husband's place at the time of their marriage. Actually, the Deuri young girls weave a good number of clothes and apparels for future provision.

7.3. Table 4.11 shows the handloom products of Nam-Deuri gaon for 1980 and 1987. The important products are Gamosa (Towel), Mekhala (Women's lower garment), Chaddar (Women's upper garment), Dhoti, Bed sheet, Shirting, Silk clothing and Endi weapper. Production of handloom articles has increased sufficiently in the year of resurvey of the village. In 1980 altogether 2028 pieces of cloths were woven. As against in 2616 in 1987. All the yarns, coloured or otherwise were mill made and purchased from the market; but the yarns for silk (mulberry) and endi were home produced. However, all the home produced yarns have not been used for weaving in 1987.

CHAPTER V

Changes in Economic conditions

1. Introduction :

1.1. The last two chapters deal with the economic activities and the change that have occurred between the First Point Survey (1930) and the Resurvey (1987) in Nam-Deuri gaon. In the present chapter the changes in economic conditions of the households and the village as a whole are assessed with reference to income and expenditure pattern. The changes in the consumption pattern, housing conditions, possession of durable consumer goods, dress habit, luxury and comfort, etc. are expected to indicate, by and large, the changes in the standard of living of the villagers.

1.2. The way of living of the Deuris of Nam-Deuri gaon is simple. But the people of the village have recently found some new avenues to raise their earnings through agriculture including horticulture, petty trades and salaried jobs. Better communication facilities than bygone days, though not satisfactory, and the movement of the traders from Jorhat town and other marketing facilities have helped the villagers in getting good prices for their agricultural commodities. Similarly, better education facilities upto higher secondary level in the vicinity of the village are the inducing factor for raising the number of salaried job holders and hence income from the source. But sometimes flood from the Brahmaputra because of proximity of the village to the river damage the crops causing heavy loss to the villagers.

2. Sources of Income :

2.1. The important sources of income of the village are agriculture including horticulture, profession and service and salaried jobs. Income from livestock and poultry is not up to the exception in the village. In a traditional tribal village where rearing pig, poultry, etc. are traditional and socially approved of and where there are ample scope for rearing milch animals income from livestock and poultry could have more. But the people reported that due to recurring epidemics of poultry birds and pigs the villagers have been losing all incentives in rearing these birds and animals on commercial basis. On the other hand, it is observed that the people are not so much interested in rearing milch animals to increase

their income from milk or milk products. It was observed that due to recurrence of floods and diseases that have occurred in epidemic form after flood took away number of livestock and poultry birds. This is one of the reasons for which people are showing apathetic attitude towards livestock rearing although that was a traditional occupation of the Deuri's.

2.2. The major source of income of the village is agriculture including horticulture. With the data collected from the village it was possible to calculate the net income from agriculture by deducting all possible costs of inputs and depreciations. From the total value of out put the actual expenses incurred in seed, hiring of draught animals and wages paid to hired labours, etc. are subtracted. The remaining portion of total value of the agricultural products is considered as residual income to the household. However, the input may be than that what has been calculated because many of the respondents have failed to recollect the actual of input in their farms. The total value of agricultural products is worked out by adding the value of the home consumed goods at farm harvest price to the actual return from sale of agricultural commodities.

2.3. The gross income of the village for 1980 and 1987 from different sources is presented in Table 5.1. Total village income has increased by 73.68 per cent in 1987 over 1980. Agriculture including horticulture has contributed 75.20 per cent and 65.56 per cent in 1980 and 1987 respectively. Percentage of income to total has increased in 1987 in the cases of 'Trade, commerce and Transport' and Profession Services and Salaried job', particularly rise in the contribution of the latter source of village income is spectacular in 1987. But the contribution of other sources to the total village income has shown a downward trend in 1987.

Table No. 5.1.

Village Gross Income by source, Nam-Deurri, 1981 & 1987.

Source	1981		1987	
	Gross Income (Rs.)	Percentage	Gross Income (Rs.)	Percentage
Agriculture (Including Horticulture)	772936	75.20	1170360	65.56
Livestock & Poultry.	79537	7.74	108117	6.06
Arts and Crafts.	24686	2.40	42771	2.40
Trade, Commerce, transport.	43450	4.20	97570	5.46
Profession, Services and Salaried Income.	74296	7.23	331260	18.56
Forest Products(Cane, Bamboo, Thatch).	16465	1.60	28180	1.58
Wages(Agril, and Non-Agril.).	9980	0.97	4500	0.25
Rent on leased out Land	6470	0.63	2320	0.13
Total :	1027820	100.00	1785078	100.00

Table 5.3.

Distribution of Households according to level of gross annual income : Nam-Douri : 1980 & 1987.

Income Groups	1980		1987	
	No. of H.H.	Total Annual Income	No. of H.H.	Total Annual Income
Below 1,000	2	1152	-	-
1000 - 2,000	6	9285	1	1897
2000 - 3,000	11	30805	6	2831
3000 - 4,000	14	48307	8	3789
4000 - 5,000	12	54946	9	4533
5000 - 6,000	9	49471	10	5849
5000 - 7,000	8	51120	10	5857
7000 - 8,000	10	74980	12	7844
8000 - 10,000	11	99512	10	9092
10000 - 15,000	16	197210	11	14507
15000 - 20,000	6	104827	20	19511
20000 & above	10	305105	27	30707
Total	115	1027820	124	1785078
		8938		14395

Table 5.4.

Per household Residual Income from Agriculture by Size Group:
 Nam-Deuri : 1980 & 1987.

Size Group (In hectare)	1980				1987					
	No. of H.H.	Gross Income	Total Input	Residual Income	Per H.H. Income	No. of H.H.	Gross Income	Total Input	Residual Income	Per H.H. Income
Landless	4	-	-	-	-	3	-	-	-	-
Below 1	15	29450	3435	25015	1734	13	38920	8190	30730	2354
1 - 2	23	82270	10890	71380	3103	34	184045	27285	156760	4511
2 - 3	28	152525	14759	147765	5277	37	275047	39047	237414	5417
3 - 4	15	118553	10658	107595	5731	12	142953	20412	122551	10213
4 - 5	13	130683	13974	116709	8978	5	75170	10513	54597	12911
5 - 7.5	8	95345	13253	83092	10385	14	251591	45575	214915	15315
7.5 - 10	5	1122220	14955	98155	16351	5	172938	22110	150828	25138
10 & above	2	478880	8255	32524	15312	-	-	-	-	-
Total :	115	772335	89490	583445	5943	124	1152088	174332	977755	7885

Table 5.2.

Distribution of Income from different sources by farm size groups.
 Nam-Deuri : 1980

Farm size groups (In hectares)	No. of H.H.	SOURCES					INCOME					Total Annual income		
		Cultivation of groups	Horti-culture	Livestock/Poultry	Arts & Crafts	Trade & Commerce	Service/Profession	Rent	Thatch/Forest/Bamboo	Agri Wages	Non-Agri Wages		Processing extrac-tion	
Landless	4	-	-	350	548	-	-	-	-	-	-	-	-	4138
Below 1 hect.	15	28650	800	3261	624	2400	2040	1280	-	-	1050	900	-	43825
1 - 2	23	11150	1120	1950	2304	4300	100	820	-	-	2980	2250	-	94074
2 - 3	28	19070	1825	19975	7195	5530	-	-	350	-	1700	1100	-	198540
3 - 4	16	117753	810	11920	3687	3720	-	1980	3415	-	-	-	-	141430
4 - 5	13	123948	6735	13340	2839	1800	10500	700	1650	-	-	-	-	153842
5 - 7.5	8	94975	1370	5525	3501	2000	18420	-	3980	-	-	-	-	127451
7.5 - 10	6	111455	765	14960	2453	5500	30480	-	1570	-	-	-	-	174053
10 & above	2	40380	500	8246	1435	14500	12756	1780	4750	750	-	-	3500	80347
Total	115	759011	13925	79537	24685	39850	74295	6470	16465	5730	4250	3600	-	1027820

Table : 5.2 (Contd.)

Distribution of Income from different sources by size Groups,
Nam-Dewri, 1987

Size Groups (In hectares)	No. of H.H.	Sources of Income							Total Annual Income		
		Culti- vation	Horticu- lture.	Livesto- ck & Po- ultry	Arts & Crafts	Trade, Commerce & transport	Profess- ion, Serv ice & Sa- laried income	Rent		Forest product (Both Agril. to non-Ag- ril.)	
Landless	3	-	-	-	721	1500	-	1000	-	3301	
Below 1	13	38920	513	3150	1415	2400	-	-	600	45998	
1 - 2	34	184045	1610	9955	8391	13490	31800	-	1200	253941	
2 - 3	37	276461	5921	35430	13938	15180	93000	620	10580	453830	
3 - 4	12	142953	1240	12740	4750	18000	24000	520	750	205053	
4 - 5	5	75170	1090	5975	3181	3000	-	-	-	88415	
5 - 7.50	14	261591	4876	25057	7533	408000	125840	-	12800	479497	
7.5 - 10	6	172938	3022	15810	2842	3200	55520	-	600	254032	
10 & above	-	-	-	-	-	-	-	-	-	-	
Total :	124	1152088	18272	108117	42771	97570	331250	2320	28180	4500	1785078

(Income in Rs.)

2.4. Distribution of income from different sources by farm size-group for 1980 and 1987 is shown in Table 5.2. In 1980 livestock and poultry occupied the second place next only to agriculture as a source of income; but in 1987 it has been replaced by Profession, Services and Salaried income. This is because of the fact that more number villagers are employed in salaried job in one hand, and comparatively some sort of apathy of the villagers towards livestock and poultry. However, livestock and poultry still occupied the 3rd important place in village income. Importance of other sources in the village income has remained almost same. There were wage earners only up to the size-group of 1.0-2.0 hectares in 1980; but in 1987, wage earners even from the size-group of 2.0-3.0 hectares have been found. Similarly, rent receivers have been found only upto the size group of 3.0-4.0 hectares in 1987 while it spread upto 10.0 hectares and above in 1980.

2.5. Table 5.3 shows the distribution of households according to level of income for 1980 and 1987. The average per household gross income has increased to Rs.14,396 in 1987 from 8,938 in 1980. Not only this, the percentage of households in the higher income groups of Rs.10,000/- and above has also increased to 46.78 (58 households) in 1987 from 27.82 (32 households) in 1980. On the other hand, percentage of households in the lower income groups of below Rs.6000/- has declined to 27.42 (34 households) in 1987 from 46.96 (54 households) in 1980. This indicates that the level of income of the households of the village has taken an upward trend over the years. But the unequal distribution of household income is prominent both in 1980 and 1987.

3. Residual Income from Agriculture :

3.1. Table 5.4 shows the per household residual income from agriculture for Nam-Deuri gaon for 1980 and 1987 by farm size groups. The residual income is calculated by deducting the value of input from the gross income of agriculture. Input in the present context includes the cost of seeds, fertilizers, hired labours, hired draught animals and rent on leased in land. Because of obvious limitations of data, net income from agriculture could not be calculated. The residual income may be taken as return to family labour from agriculture. Table 5.4 shows that higher the size of operational holdings the higher is the residual income from agriculture. The per household residual income has considerably increased in 1987 which

Table 5.5.

Distribution of Income by farm size groups and per capita income:
 Nam-Deuri: 1980 & 1987.

(Income in Rs.)

Size Group (in hectares)	1980				1987			
	No. of H.H.	Population	Total Income	Per Capita Income	No. of H.H.	Population	Total * Income	Per Capita Income
Landless	4	22	4138	188	3	15	3301	220
Below 1 hect.	15	88	40390	459	13	78	38808	498
1 - 2	23	180	83184	462	34	279	225556	812
2 - 3	28	245	183881	751	37	384	414783	1080
3 - 4	16	160	130562	816	12	122	184551	1514
4 - 5	13	152	149168	925	5	60	77803	1297
5 - 7.5	8	85	114208	1344	14	177	432882	2445
7.5 - 10	6	92	160098	1739	6	115	231992	1999
10 & above	2	31	72091	2326	-	-	-	-
Total	115	1055	938330	881	124	1231	1610746	1308

* In income, only the residual income from Agriculture is included.

is the result of among other things the higher price of agricultural commodities prevailed in the year of resurvey of the village.

3.2. Distribution of per capita income by farm size group for the village for 1980 and 1987 is presented in Table 5.5. Economic condition and level of living of a family depend on per capita income. Per capita income for the village as a whole has increased to Rs.1,308 in 1987 from Rs.881 in 1980. In 1980, the per capita income had a direct relationship with the farm size. In other words, per capita income in that year increased along with rise of farm size. But in 1987, it was found that per capita income had no direct relationship with farm size. The Per Capita income in the size groups of 4.0-5.0 hectares and 7.5-10.0 hectares is lower than those in the preceding size groups. This indicates that per capita income does not necessarily depend on farm size even in a predominantly agricultural village. Income from non-agricultural sources for which there are avenues in the village and which has been referred to earlier, is considered to be responsible for this type variation in per capita income. However, proportion of households with higher per capita income than the average village per capita income has remained almost same. Twenty nine (25.21%) households in 1980 and 32 (25.81%) households in 1987 had per capita income above the village per capita income.

4. Household Expenditure :

4.1. For estimation the household expenditure, expenditure incurred by a family in food items and fuel and lighting in the month preceding the period of the resurvey was collected from each household and annual expenditure are estimated on the basis of monthly expenditure. Expenditure on home-produced food items are estimated by imputing value on them at the prevailing market rate. Expenditure on non-food items, like clothing and footwear, education, medicine, ceremonials and entertainments, etc. was collected for the year preceding the period of resurvey. This expenditure on non-food items was added to that on food items to get the total annual expenditure of a household.

Table 5.5.

Annual Expenditure on different heads according to size group of Operational holdings. Nam-Deuri : 1980

Size group of operational holdings (In hectares)	No. of H.	FOODS		HEADS		OF		EXPENDITURES				Total	
		Cereals	Non-Cereals	Intoxi- cant	Foot wear	Fuel & Lighting	Educa- tion	Medical	Enterta- inments & Ceremo- nials	Travel- ling	Servi- ces		Others
Landless	4	495.8	1428	1310	425	150	-	25	-	8	32	835 0	
Below 1 hect.	15	36536	7920	8258	733	1925	-	340	-	13	125 0	68108	
1 - 2	23	57696	15016	12328	7107	1984	75	5515	250	40	3184	105695	
2 - 3	28	75150	24748	32952	12305	2532	1050	2040	170	1267	5754	161013	
3 - 4	16	50880	17880	22244	12331	2532	1050	3875	200	1141	4740	124211	
4 - 5	13	50550	18744	20335	14975	2640	1000	2500	800	2113	7944	12657	
5 - 7.5	8	30312	16400	12084	16520	1664	525	1530	50	1959	8080	9330	
7.5 - 10	5	29550	17612	23180	10397	1684	115	2780	2400	2205	8075	105139	
10 & above	2	10980	9720	10000	8015	934	2350	1800	1200	2140	4475	53595	
Total	115	346542	129468	143072	89305	16324	18992	22735	20505	5090	10896	45350	608489

Table 5.6
Annual Expenditure on different heads according to size group of operational holdings, Nam-Douri : 1987.

Size group of operational holding. (In hectares)	No. of H.	(In Rupees)												
		Cereals	Food-Non-Cereals	Intoxicants	Clothing & Foot wear.	Fuel & Lighting	Education	Medical	Entertainment & Ceremonials	Travelling	Services Others	Total		
Landless	3	4236	1825	1915	1115	394	675	165	320	-	-	-	256	10901
Below 1 hect.	13	37824	14560	15524	7432	2586	1806	3410	2540	91	170	4608	90559	
1 - 2	34	143565	53432	54772	26582	5996	10252	7638	8230	1540	442	14240	32509	
2 - 3	37	196702	74012	78836	37452	7848	14672	12925	10110	2890	3627	20144	459226	
3 - 4	12	53096	23472	24656	12835	2712	3150	5362	3180	1056	5292	6205	151035	
4 - 5	5	31275	11538	12380	6648	1255	1685	896	4430	720	2558	3265	75660	
5 - 7.5	14	92240	34146	36262	18276	3340	6646	4324	7004	1600	982	10425	216320	
7.5 - 10	6	60872	22450	23562	12718	1837	2566	3712	2816	1306	3512	6072	142253	
10 & above	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total	124 629010	235435	247927	124058	25368	41474	38450	38538	9283	15593	55016	1473552		

* Fuel & Lighting includes electricity charge of 12 households for 6 months in 1987.

4.2. Annual expenditure on different items according to size-group of operational holdings of the village for 1930 and 1937 is presented in Table 5.6. It is observed that maximum expenditure have been incurred by the villagers on food-items. Next to food items, intoxicant has occupied the major position. The expenditure on intoxicants seems to be very high both in 1930 and 1937. But this is quite natural in a tribal village where taking rice beer both as a stimulant and as tiffin is a common practice. In fact, the Deuris of Nam-Deuri village use as much rice in preparing rice beer as they consume for the principal meals. Under the head intoxicants, the expenditure made on other items like Bili, Cigarettes, tobacco, liquor other than homeproduced rice-beer etc. is also included.

4.3. Expenditure under the heads education and medical seems to be very low in comparison to other heads both in 1930 and 1937. The facts behind this are that education facilities upto Higher Secondary level is available almost within the village and education upto H.S.L.C. is free and so most of the Students attend their educational institutions from home. Only those students who are prosecuting studies for which facilities are locally not available have to stay outside the village. Similarly, many of the ailments are treated locally either in the traditional way with local herbs or in the State Primary Health Centre which located within the village and where some medicines are supplied free of cost.

4.4. Distribution of expenditure in different items is shown in Table 5.7. The per household average annual expenditure has increased to Rs.11,834 in 1937 from Rs.7,373 in 1930. This is a rise in expenditure by 52.43 per cent. On the other hand, average per capita annual expenditure has increased by 50.19 per cent. It cannot be said that with the rise in annual expenditure, the standard of living of the people also has improved substantially. The rise in expenditure is mainly a contribution of price rise over the years.

4.5. It has been found that annual expenditure on food items has increased to 53.72 per cent in 1937 from 56.11 per cent in 1930. Percentages of expenditure to total expenditure on other items have remained more or less same except clothing and footwear where there is a decline to 3.42 per cent in 1937 from 10.53 per cent in 1930. On the whole, it can be said expenditure pattern in the village has not undergone any marked change over the years.

Table 5.7.
Distribution of Expenditure in different items, Nam-Deuri:
1980 & 1987.

Head of Expenditure-	1980				1987			
	Total Expenditure	Per-centage.	Per H.H. Expenditure.	Per Capita Expenditure	Total Expenditure	Per-centage.	Per H.H. Expenditure	Per Capita Expenditure.
I. Food :								
(i) Cereals	345542	40.85	3014	325	529810	42.74	5079	512
(ii) Non-Cereals	129458	15.25	1126	122	235435	15.98	1899	191
Sub-Total Food	475110	55.11	4140	447	855245	58.72	5988	703
1. Intoxicants	143072	15.85	1244	134	247929	15.82	1999	201
2. Clothing & Foot wear	89305	10.53	777	84	124058	8.42	1000	101
3. Fuel & Lighting	15324	1.92	142	15*	25958	1.75	209	21*
4. Education	18992	2.24	155	18	41474	2.81	334	34
5. Medical	22735	2.58	198	21	38450	2.61	310	31
6. Entertainment & Ceremonials	20505	2.43	179	19	38538	2.62	312	31
7. Travelling	5090	0.50	44	5	9283	0.63	75	8
8. Services	10896	1.29	95	10	16593	1.12	134	13
9. Others	45350	5.34	394	43	65016	4.48	532	54
Sub-Total Non-Food	372379	43.89	3238	350	508417	41.28	4907	494
Grand Total	848489	100.00	7378	797	1473552	100.00	11884	1197

* In case of education, if only students are taken into account the per capita expenditure will be Rs. 97 and Rs. 120 for 1980 and 1987 respectively.

Table 5.8.

Surplus and Deficit households by Farm-Size Groups, Nam-Deuri, 1980 and 1987.

Size Groups (In hectares)	1980				1987			
	No. of H.	Total Income	Total Expenditure	Surplus (+) Deficit (-)	No. of H.	Total Income	Total Expenditure	Surplus (+) Deficit (-)
Landless	4	4158	8350	- 4223	3	3301	10901	- 7600
Below 1 hect.	15	40390	58108	- 17718	13	38808	90559	- 51751
1 - 2	23	83134	105695	- 22561	34	22655	32589	- 10033
2 - 3	28	183881	161013	+ 22868	57	414783	459226	- 44443
3 - 4	46	130552	124211	+ 6121	12	184551	151035	+ 33515
4 - 5	13	149858	126967	+ 22891	5	17803	76560	+ 11463
5 - 7.5	8	114208	95501	+ 18697	14	452822	215328	+ 237494
7.5 - 10	5	160008	105139	+ 54869	6	251922	142263	+ 109659
10 and above	2	72091	53595	+ 18496	6	251922	142263	+ 109659
Total	115	938330	848489	+ 88000	124	1510746	1473652	+ 137084
				(+ 765)				(+ 1106)

Note : Figures in the parentheses indicate per household deficit or surplus .

4.6. Surplus and deficit households by farm-size group are shown in Table 5.3. Annual expenditure varies from household to household. It depends on income and number of members in the concerned family. Again, income in a pre-dominantly agricultural village mainly depends on farm size. The average annual deficit per household in the size group below 1.00 hectare is as high as Rs.3,931 in 1980. But the respondents of the deficit households did not like to disclose from where they met the deficit. Perhaps, in the lean season, the deficit households maintain a very tight family budget. Naturally, the standard of living of the deficit families is very low.

4.7. There were deficit families both in 1980 and 1987. But the number of such families has increased in 1987. But the number of such families has increased in 1987. Table 5.9 shows the number of deficit and surplus families by farm-size. The number of deficit families has increased to 61 in 1987 from 40 in 1980 which means that in Nam Deuri gaon there were 34.73 per cent families with deficit budget in 1980 and the corresponding figure for 1987 has gone up to 49.19 per cent. This is a dark aspect in the village. Families with deficit budget are found up to be in the farm-size group 2.0-3.0 hectares in both the years. Of course, there are a number of surplus households right from the farm-size group 1.00-2.00 hectares in the village. This seems to have direct relationship with the family size and not merely on the farm-size alone. Moreover, productivity aspect of land is also one of the contributing factor for which small size group of farm families (1.0 to 2.0 hectare) are found to be self sufficient or surplus growers while in higher size group 2.0-3.0 hectare there are deficit households.

4.8. Table 5.10 shows the per household and capita income and expenditure by farm-size group of Nam-Deuri gaon for 1980 and 1987. It has been found that per household and per capita income increased both in 1980 and 1987 along with the increase in farm size with the exception that in 1987, the per capita income for the size-groups of 4.0-5.0 hectare and 7.5-10.0 hectares are lower than those of the preceding farm size groups. That is mainly due to comparatively larger numbers of members in the concerned families and comparatively more concentration of earners from the non-traditional occupations of trade, commerce and transport and salaried job in the concerned preceding size-groups. On the other hand, though per household and per capita expenditure vary according to farm-size group in 1980, per capita expenditure does not keep conformity in the case of some of the farm size groups in 1987. Per capita expenditure in the farm size groups of 5.0-7.0 and 7.5-10.0 hectares are lower than in the farm-size group 4.0-5.0 hectares. This is because of the fact that people of the farm size group 4.0-5.0 hectares are more exposed to modern way of life as more persons from this group are engaged

Table 5.9

Number of households reporting as 'Surplus' or 'deficit' family budget by farm size groups, Nam-Deuri, 1930 and 1937.

Farm size Groups (In hect.)	1930			1937		
	Total No. of H.H.	surplus H.H.	Deficit H.H.	Total No. of H.H.	Surplus H.H.	Deficit H.H.
Landless	4	--	4	3	--	3
Below 1 hect.	15	--	15	13	--	13
1 - 2 "	23		6	17	34	3
2 - 3 "	28	24	4	37	23	15
3 - 4 "	16	16	--	12	12	--
4 - 5 "	13	13	--	5	5	--
5-7.5 "	8	3	--	14	14	--
7.5-10 "	6	6	--	6	6	--
10 & above	2	2	--	--	--	--
Total :	115	75	40	124	63	61

Table 5.10.
Annual per household and per Capita income and expenditure by
farm size groups : Nam-Deurri;
1980 & 1987.

Farm size groups (In hectares)	1980				1987			
	Income		Expenditure		Income		Expenditure	
	Per H.H.	Per Capita	Per H.H.	Per Capita	Per H.H.	Per Capita	Per H.H.	Per Capita.
Landless	1034	188	2090	380	1100	220	3634	727
Below 1 hect.	2693	459	4541	774	2985	498	6966	1151
1 - 2	3517	462	4595	587	6666	812	9509	1171
2 - 3	6567	751	5750	659	11210	1080	12412	1195
3 - 4	8160	816	7763	776	15388	1514	12585	1238
4 - 5	11528	925	9767	784	15561	1297	15332	1278
5 - 7.5	14276	1344	11913	1121	30916	2445	15452	1222
7.5 - 10	26668	1739	17528	1143	38554	1999	23711	1225
10 and above	36045	2326	26847	1732	-	-	-	-
Total	8159	881	7378	797	12990	1308	11884	1197

Debts by Source, Year and outstanding loan : Nam Deuri
1980 & 1987.

Table 5.11.

Year of Study	Debts relating to the Year.	Total H.H.	SOURCES		Total Loan (Rs.)	Outstanding Loan (Rs.)	
			Bank (Rs.)	Co-villagers (Rs.)			
1980	1975	2	2700	-	2700	2700	
	1978	2	-	2195	2195	500	
	1979	4	30000	400	3200	3500	
	Total	8	32700	2579	3200	38495	3600
1985	1982	1	-	2000	-	2000	-
	1984	1*	2000	-	-	2000	-
	1985	4	7100	3000	3000	13100	-
	1986	5	7000	1000	3000	11000	9100
Total	11	16100	6000	5000	28100	15434	

* One household in 1985 took loans from Bank as well as from Co-villager.

in non-traditional occupations like trade, commerce and transport and salaried job. As a result, per capita expenditure for this group under the heads ceremonies and entertainment, travelling and services is much higher than those in the next higher size groups. This has led to higher per capita expenditure for the size group of 4.0-5.0 hectares than those for the size-groups of 5.0-7.5 hectares and 7.5-10.0 hectares.

5. Indebtedness :

5.1. It has been shown earlier in this Chapter that 40 households in 1980 and 63 households in 1987 were having deficit family budget in Nam-Deuri gaon. Usually the landless and small and marginal households are running with deficit budget. Because of their small land holding they are not self-sufficient in paddy. As a result they have either to purchase rice from the market or borrow paddy from co-villagers at the time of need. This kind of paddy borrowing from co-villagers has to be repaid in kind just after harvesting of paddy. But the borrowers have to incur some loss as some of the co-villagers demand more paddy than borrowed quantity keeping in view the higher price at the time of actual borrowing and lower prices at post harvest period. However, data on this type of borrowing were not collected as at the time of investigation no family was found to be in such debt as it was post-harvest period.

5.2. Some of the families were found to be in cash debt both in 1980 and 1987. The usual sources of such cash loan in the village are institutional agency (banks) and relative and co-villagers. In 1980, eight families were indebted with an outstanding amount of Rs.3,600/-. Of these eight families three took loan from banks, three from relatives while two from co-villagers. On the other hand, in 1987 altogether 11 households reported that they took loan during the period of 1982 to 1986. Of the 11 households, seven households borrowed from banks, three from relatives, and the other two from co-villagers. They had an outstanding loan amount of Rs.15,434 at the time of the resurvey. Usually, the loan taken from relatives and co-villagers are interest free. The position of indebted in the village is shown in Table 5.11.

(No. of families)	(Rs.)	(Rs.)
Loan	1980	1987
From Banks	22000	4000
From Relatives	1122	200
From Co-villagers	278	233
Total	23400	4200

CHAPTER VI

SUMMARY AND CONCLUSION

1. In the foregoing Chapters the changes that have taken place in Nam-Deurigaon, a plains tribal village in Jorhat district during the period 1980 (First Point Survey) to 1987 (the Re-survey) have been discussed. The village exclusively inhabited by people of the Deuri community (a plains Tribe) is situated in the north-western part of the district at a distance of about 20 km. from Jorhat town, the District Head Quarters. The village is connected with Jorhat town by a P.W.D. gravelled road. Kakilamukh-Kalbari road is a feeder road and this links the village with Kakilamukh-Jorhat P.W.D. road. Transport facilities to and from Jorhat town is somewhat satisfactory. Public buses ply daily between Jorhat and Bahphola which provide transport facilities to the villagers of Nam-Deuri and other neighbouring villages.
2. Number of households have increased during the intervening period from 115 to 124, even though four families emigrated from the village during the period. Population of the village has increased to 1231 in 1987 from 1065 in 1980. This is an increase of 2.23 per cent per annum which is lower than the State growth rate of population (3.5%). Both nuclear and joint families are found in Nam-Deuri gaon. Increase in the number of joint families (9.80%) is slightly higher than that (8.20%) of the nuclear families. The average size of nuclear families has slightly increased to 6.98 persons from 6.80 and that in the joint families has increased to 13.02 persons from 11.37 during the period.
3. The percentage of population in the broad age-group of 0-15 years has declined by 1.18 and that in the age group of 60 years and above has increased by 0.43 while percentage of population in the age-group 15-60 has remained almost constant. There has been a decline in the number of females per 1000 males from 1006 to 982 in 1987.
4. Percentage of unmarried and married persons to total population has remained almost the same during the period^{of} 7 years. No case of early marriage was reported in the village which is a tribal characteristic of the region.

5. In the case of education it is noteworthy that the number of H.S.L.C. passed persons in the village has increase to 33 in 1987 from mere 6 in 1980. In the broad category of graduate, post-graduate professional quqlifications 11 persons were found in 1987, while it was only 7 in 1980. The percentage workers and helpers to total population has declined for which percentage of non-workers has increased leading to increase in dependency ratio over the period. This is because of the fact that many of the students in 1987 have either stopped working in the fields or they have been encouraged by parents to devote entire time and energy in their study.

6. Total land under possession of the villagers of Nam-Deurigaon has declined to 376.60 hectares in 1987 from 400.01 hectares in 1980. Net cultivable land has been reduced to 319.31 hectares in 1987 from 334.77 hectares in 1980, mainly due to use of cultivable land for homestead by the increased families and sale of land by the emigrated families. The number of households without operational holdings has also declined to three in 1987 from four in 1980.

7. Total cropped area in the village has increased to 351.41 hectares in 1987 from 348.02 hectares in 1980. Though this rise in operational holding is nominal, it is significant in view of emigration of four households from the village. This increase in operational holding is mainly due to increase in leased-in land in 1987. There has been some changes in the number of households in the different size-groups from 1980 to 1987. But no big farmer (10.0 hectares and above) was found in the village in 1987 while two such big farms were recorded in 1980. The average size of operational holding per household for the village came down to 2.83 hectares in 1987 from 3.03 hectares in 1980. tThe percentage of owner cultivators to total households has been reduced to 70.25 in 1987 from 77.48 in 1980. On the other hand, percentage of households and area operated by the mixed tenants have increased in 1987 over 1980. The reduction in area under operation for the owner cultivators in 1987 is the result of conversion of some of the households to mixed tenant group. More than 80 per cent of the area operated by the villagers are owned land. So dependence on leased in land is minimum in the village both in 1980 and 1987. This, however, does not mean that there is no demand for leased-in land.

Only scarcity of land to be leased-in in the vicinity has compelled the farmers to be contented with what they possessed.

8. So far as livestock population is concerned there has been an increase in the number of goats, fowls, ducks and pigeons in the village in 1987. But a fall in the pig population in the year of resurvey is recorded. An epidemic disease that broke out in the village is the reason of fall of pig population in the village. Bullocks and he-buffaloes are the main draught animals in the village. There has been a decline in the number of bullocks in 1987; but this has been compensated with she-buffaloes and horses. Horses are also used as draught animal only in the Rabi season when fields are dry. Horse is a new addition to the village as draught animal. During the year of resurvey there were 33 horses in the village while in 1980 no horse was used for ploughing.

9. Possession of consumer durable goods signifies the economic condition of the owners. Easy communication from Nam-Deurigaon to Jorhat town and spread of education have helped the villagers to acquire some modern consumer durable goods. Increase in the number of radio/transistor, by-cycle, motor cycle/scooter, cot, etc. in 1987 over 1980 indicates that the economic condition of the villagers has improved by the time of the resurvey.

10. The Deuri women are expert in weaving. They prepare their own dresses as well as some dresses for their menfolk in their looms. Now fly-shuttle (improved loom) looms have become very popular in the village. The number of fly-shuttle looms has increased to 118 in 1987 from 47 in 1980. On the other hand, the number of traditional looms came down to 103 in 1987 from 132 in 1980. Production of endi and silk yarn is another cottage industry of the village. Rearing of endi worm or mulberry silk worm is a part time work of the women. The number of such rearers has increased in the village in the year of resurvey. Similarly, production of endi and silk yarns has also increased.

11. Nam-Deurigaon is located in a paddy growing area. Rice being the staple food of the villagers, paddy covers the major portion of cultivable land of the villagers. Potato, Black-gram, Pea, Jute, Vegetables, are grown in the village, the last two being commercial crop for the villagers.

12. Ahu (summer), Bao (Autumn) and Sali (Winter) are the three varieties of paddy raised in the village. There has been an

increase of 2.3 per cent in the total land under paddy from 1930 to 1937; but a decline in area under Ahu and Bao paddy is reported during the period. Yield rate of Ahu and Sali paddy has increased whereas it has come down in the case of Bao paddy during the period. On the whole, an increase of paddy production by 6.7 p.c. was recorded during the period. Though the area under Patal (*trichosanthes diocia*) has declined during the period its yield rate has increased. So is the case with Mustard. Both area and yield rate of Blackgram, Pea, Jute and Tobacco have been found to be increased.

13. It is found that 24.69 per cent of total cultivated area are sown more than once in 1937 as against 21.94 per cent in 1930. This indicates the increase in crop intensity in the village. Per capita net cultivated area in 1937 has been found to be 0.29 hectare as compared to 0.33 hectare in 1930. This is mainly due to increase in population in the village.

14. Both male and female adult persons of every cultivating household are engaged in their own farms. A few households engaged hired labours also either on daily basis or on periodic system. Of the total workers engaged in cultivation, 94.35 per cent are family workers in 1937 as compared to 96.36 per cent in 1930. The fall in the number of family labours in 1937 is due to the lesser number of helpers who are usually students. Though the number of permanently hired labours remained almost unchanged, the number of casually hired labours has increased by 9 in 1937.

15. Hired labours were employed only by the comparatively large farmers (4.0 hectares and above) in 1930; but it was found that in 1937 households even with small holdings have engaged hired labours. On the other hand, it was found that in 1937 the large farmers of Nam-Deurigaon have become more self-dependent than before in the case of farm workers. The income of the agricultural labours has increased considerably in 1937 than 1930 as a result of the rise in wage rate in recent years.

16. Net income of the villagers from agricultural products could not be calculated because of limitations of data on input. However, residual income is worked out by deducting the cost of seeds, fertilisers, wages paid for hired draught animals, and agricultural labours and rent paid for leased in land. This does not cover the cost of family labour, cost of tools and

implements and maintenance of draught animals. So deducting the cost of input as mentioned above from the total value of the produce the residual income of the households have been calculated. The average residual income per household from agriculture is found to be Rs.4533.05 in 1987 as compared to Rs.3,279.81 in 1980. The average per household residual income does not bear any positive relation from the size groups of 5.00 hectares and above. In fact, the average per household residual income tends to decline in the comparatively big farms in the village. In the size groups below 3.0 - 4.0 hectares the average per household residual income is found to be lower than the average per household residual income taking all the households together. This is true both in 1980 and 1987 besides the surplus growers of paddy, some of the households with deficit paddy production are found to sell paddy just to meet their immediate requirements.

17. Weaving is the only worth mentioning cottage industry in Nam-Deuri gaon. Besides weaving, some households rear endi and silk worm and the spinning is also done by the women. In fact, in Nam-Deuri gaon the entire cottage industry is dominated by women. As compared to 263 women engaged in cottage industry in 1980, 312 women were found to be engaged in the vocation in 1987. No male person was found to be engaged in any of the cottage industries in 1987 although 4 (four) persons were engaged in cottage industry like carpentry, bamboo and cane work, etc. in 1980. But even in the case of the women, cottage industry is a part-time occupation. So, the average man-days per worker engaged in cottage industry has only slightly increased in 1987. Some of the handloom products of the Deuri weavers are very fine and of superior quality. Actually, they weave for family requirements. Whatever cloths remain unused with the unmarried girls, are taken by them to their husband's residence after marriage. As compared to 2028 pieces of cloths woven in 1980, the women of Nam-Deuri gaon produced 2616 pieces of various cloths in 1987.

18. The people of Nam-Deuri gaon have found some new avenue to raise their income from agriculture and non traditional occupations like trade, salaried jobs, etc. Better communication facilities and the movement of the traders from Jorhat town and elsewhere have helped the villagers to get good prices for their agricultural commodities. On the other hand, better

education facilities upto higher secondary level in the vicinity of the village have led to increase the number of salaried job holders in the village. The villagers could have improved their economic condition had their crops not been damaged by floods from time to time.

19. The villagers derive their income mainly from agriculture, profession and services and salaried jobs. The villagers have lost all incentives in poultry farming and piggery due to recurrence of diseases generally after floods in epidemic form. Total gross income for the village has increased by 73.68 per cent in 1987 from that of 1980. Agriculture including horticulture has contributed 75.20 per cent of the gross income in 1987 as against 65.56 per cent in 1980. Contribution of salaried job to the gross income of the village is spectacular in 1987. Wage earners have been found in the village even upto the size group of 2.0 - 3.0 hectares of land in 1987 whereas wage earners were found only upto the size group of 1.0 - 2.0 hectares in 1980. Rent receiver family is found only upto 3.0 - 4.0 hectares in 1987 as against upto 10.0 hectares and above size group in 1980.

20. The average gross income per family has increased to Rs.14,396.00 in 1987 from Rs.3,938.00 in 1980. The percentage of households in the higher income groups of Rs.10,000.00 and above has increased to 46.78 in 1987 from 27.82 in 1980. Similarly, percentage of households in the lower income groups of below Rs.6000.00 has declined to 27.42 in 1987 from 46.96 in 1980. This means that the level of income of the households in the village has improved considerably.

21. Per capita income in the village has increased to Rs.1,308 in 1987 from Rs.381 in 1980. In 1980 per capita income had a direct relationship with farm size. But this relationship was not found in the village in 1987 because of considerable income from some non-agricultural sources e.g. Profession and Services, Salaried Job, etc.

22. Maximum expenditure have been incurred by the villagers in food items followed by intoxicants which includes rice beer, Bidi, cigarettes, tobacco, etc. Annual expenditure on education and medical treatment seems to be nominal in the village. This is because of free education upto H.S.L.C. level and very few number of students from the village prosecuting studies outside

the village. Similarly, many of the ailments are treated locally in the traditional way or in the State Primary Health Centre located in the village where some protective medicines are supplied free of cost.

23. Per household average annual expenditure has increased to Rs.11,884/- from Rs.7,378/- in 1980. This is a rise in expenditure by 62.43 per cent. Similarly, average per capita annual expenditure has increased by 50.19 per cent. Annual expenditure on food items has increased by 58.72 per cent of the total in 1987 from 56.11 per cent in 1980. In the case of clothings there has been a decline in annual expenditure to 8.42 per cent in 1987 from 10.53 in 1980. It is observed that expenditure pattern in the village has not undergone any marked change in the village over the years.

24. There were deficit families in the village both in 1980 and 1987. The percentage of deficit families has gone upto 49.19 in 1987 from 14.73 in 1980. Though some deficit families were found in the size group of 2.0 - 3.0 hectares, there were a number of surplus grower families even in the size-group 1.0 - 2.0 hectares. The deficit families meet their requirements of rice either by purchasing it from market or by borrowing paddy from co-villagers which is to be returned just after harvest.

25. Some of the households were found to indebted both in 1980 and 1987. The usual sources of such cash loan in the village are banks, relatives and co-villagers. Loans from the latter two sources are interest free. In 1980, either families were found to be indebted with an outstanding loan of Rs.3,600/-. But in 1987, 11 households were found with an outstanding loan of Rs.15,434.

26. The people of Nam-Deurigaon are availing of medical facilities from Kalbari State Dispensary located at a distance of about 1 km. from the village. The dispensary is equipped with one full time Doctor, one Pharmacist, one Nurse, one Mid-wife and a Chowkidar. The members of the medical staff were found to stay in the staff quarters located within the campus of the dispensary. The villagers can also avail of medical facilities available at Jorhat, the district headquarters which is about 20 km. away from the village. On the whole, Nam-Deuri village enjoys somewhat better medical facilities at present than many other remote tribal villages of the State.

27. The Veterinary Sub-Centre, established in 1986, is located near the Kalbari State Dispensary. A Veterinary Surgeon and a Field Assistant posted in the Sub-Centre serve the veterinary needs of the people.

28. The location of the village near the bank of the Brahmaputra and the sandy alluvial nature of the soil may be taken as a contributing factor for creating a natural drainage system. However, some low-lying areas of the village suffer from water-logging during the most part of the year. These water-logged areas caused health hazard as these are the breeding places of mosquitoes. These low-lying areas, the fact, spoiled the sanitation and environment of the surroundings. Only a few families of the village have constructed either permanent or kutchha latrines. Others use the nearby jungles as their natural latrine. This creates an unhealthy condition in the village.

29. The majority of the villagers of Nam-Deuri usually get pure drinking water. There were only 10 tube wells at the time of the first point survey. But the number of tube wells has increased to 22 at the time of the resurvey. It is reported that majority of the tube wells were installed by individual households while others were installed by the Public Health Engineering Department and the village panchayat. On the whole, the position of drinking water in the village has improved at the time of resurvey.

CONCLUSION

1. The data of the Resurvey of Nam-Deuri gaon indicate that the economy of the village has been improving. The pace of agricultural development and overall economic development in the village is rather slow because the village has been experiencing recurring floods from the river Brahmaputra. Increase in agricultural production along with rise in prices of agricultural commodities and income from non-traditional occupations like profession and services, salaried job, etc. have helped in raising the village income. Rise in the yield of some of the major crops grown in the village e.g. sali paddy, patal, mustard, etc. is also a contributing factor in increasing village income. But the higher yield rate is only due to favourable weather that prevails in the year of resurvey.

2. In fact, the villagers grow their crops in traditional method. Use of chemical fertilisers and pesticides is absent in

the village in the year of resurvey. Even use of available organic manure i.e. cowdung is confined to only Patal cultivation. Whatever H.Y.V. seeds of paddy or any other crop have made inroad in the village is cultivated only in the traditional method. Absence of proper irrigation facility in the village may be responsible for not adopting package of practices in cultivation. But the villagers grow some crops e.g. Patal with utmost care with intensive human labour. Perhaps, financial gain from Patal cultivation has motivated them to take it up with commercial motive.

3. The recent introduction of horses is a great relief to the cultivators, particularly, to the poor ones as the prices of bullocks and buffaloes are very high in comparison to the prices of horses. Though one household sold its old power tiller, two other households brought two new power tillers after the first point survey and these were reported to be in use. The number of diesel pumpsets in the village has increased from two in 1980 to 14 in 1987. These are mainly used for watering the seed beds of Sali paddy. For want of source of water to lift by pumpsets, these could not be used as it should have been. Seven diesel operated shallow tube wells were installed in the village after the first point survey. These are used, as and when necessary, by those farmers whose farms are located near the shallow tube wells. The cost of diesel oil is borne by the concerned individual household. The increase in the number of tube wells from 10 to 22 during the intervening period has not only helped the villagers in getting good drinking water; but also helped some of the individual households who installed in tube-wells conveniently at their own in watering their vegetable gardens.

4. The above facts indicate that the villagers of Nam-Deuri gaon are not apathetic to innovations. But it was reported by the villagers that the extension personnels of the agriculture department have not made any worth-mentioning effort to convince and guide the farmers for adopting scientific technology of crop cultivation.

5. Some of the villagers possess quite a good number of milch animals. It was, however, observed that the villagers take the least care of the cattle to raise milk production. Whatever milk they get, they sell it to outside traders who actually maintain the accounts also and because of this most of the milk

producers have been deceived by the traders through so many fraudulent practices.

6. There is also scope for rearing livestock animals like pig, chicken, etc. on commercial basis for which there is good market. But because of recurring epidemics of these animals and birds the people have lost all incentives to take up rearing of livestock on commercial basis. It was reported that the Veterinary services and assistance are not timely and effective. With better technical guidance and effective preventive measures, the Veterinary Department may come forward to help the villagers.

7. Besides rearing endi worms, the women of the village have introduced rearing mulberry worms also. Castor plants and mulberry plants are growing well in the village. The State Sericulture Department may play an important role in the extension of rearing these valuable worms and thereby improve the economy of the village.

8. High cost of local draught animals i.e. bullock and buffalo has compelled some of the farmers to hire these animals for ploughing their fields. This has sometimes delayed trans-plantation of Sali paddy as a result of which yield rate suffers. The recent introduction horses as draught animal in the village has helped some of the farmers. But horses can be used only in the Rabi season. Some of the enlightened farmers of the village opined that had they got the services of tractor - free or otherwise for judicious preparation of their fields, their transplation would have been timely and they would have got better yield of paddy. The State Agriculture Department may arrange a pool of tractors for Nam-Deuri and its surrounding villages.

9. Since Patal cultivation is done on commercial basis by the villagers and production of oilseeds and pulses (the local soil is suitable for the crops) has got country-wide importance at present, the concerned govt. department may help the farmers by disseminating the latest scientific method of raising the crops. Further, imparting effective ideas of crop rotation for better yield of these crops would be able to improve the economy of the villagers.

10. Adoption of full package of practices of improved agriculture by farmers cannot be expected unless proper water

management is there. Nam-Deuri and its surrounding villagers are usually affected by floods in the summer and drought in the Rabi crop season. So proper irrigation facility is the most important pre-requisite before the introduction of scientific method of cultivation in the true sense of the term. The study indicates that the tribal farmers are not averse to change but guidance from the concerned departments are, by and large, lacking.

APPENDIX I

Sociological Note on the Deuris.

I. Introduction :

- 1.1. The Deuris constitute one of the aboriginal plain tribes in the Brahmaputra valley of Assam. They are ethnically affiliated to the great - Tibetó - Mongolian tribes of Assam. As per 1971 Census, their total population was 23,080. The estimated population of the Deuris in March, 1987 was 37,028.
- 1.2. Historically the Deuris were a branch of the Chutiyas who reigned eastern Assam prior to the advent of the Ahoms. The Deuris were the priestly section of the Chutiyas. Formerly, they conducted magico-religious rituals in the royal temples of the Chutiya kingdom. That the Deuris were a clan of the Chutiyas is evident from the sub-divisions as stated by Endle (1911)* and Gait (1933)**. They divided the Chutiyas into four sub-divisions, viz. (i) the Hindu-Chutiyas, (ii) the Ahom Chutiyas, (iii) the Deuri-Chutiyas and the (iv) the Borahi-Chutiyas. Among these groups, only the Deuri-Chutiyas or the Deuris are recognised by the constitution of India as one of scheduled tribes of Assam. The Deuris have been able to maintain their old traditions, religious beliefs and practices in tact though they are exposed to the influence of various religious faiths. But the pantheon of Gods and Goddesses of the Deuris clearly indicates that they are Hindus. Only the names of the Gods and Goddesses are different from the Hindu names. All the Deuris identify themselves as Hindus.
- 1.3. The original abode of the Deuris was the banks of the river Dibong, Tengapani and Patarsal which now fall within the jurisdiction of Lohit district of Arunachal Pradesh and Chapakhowa sub-division of Dibrugarh district of Assam. Due to constant feuds with the neighbouring populations particularly with the Mishims and the Abors (Adis) they had to move westward. There is a historical account that the Ahom king Gourinath Singha (1780-1795) being unable to protect them from their enemies, shifted them to rehabilitate in Majuli, a river island in the

* Endle, S (1911) : The Kacharis.

** Gait, E (1933) : A History of Assam.

Brahmaputra where some of the Deuri villages are still exist. Now Deuris are scattered in some riverine areas of Lakhimpur, Dibrugarh, Sibsagar, Jorhat and Sonitpur districts of Assam.

1.4. The Deuris are again divided into four territorial groups - (i) Dibongiyas, (ii) Borgonyas, (iii) Tengapaniyas, and (iv) Patragonyas. These names originated with their habitate. Among these groups, only the Dibongiyas seem to have preserved their dialect and socio-ritual traditions. The other groups have altogether given up their traditional dialect in favour of Assamese.

2. Setting :

2.1. Like the Mishings, the Deuris also have a traditional preference to living along the riverine areas. The environment of their habitat had influence their economy, life and culture in various ways. As they generally live on the river banks, the Deuris usually construct their dwellings on raised platform. The length of the house depends upon the number of the members of the family. A big joint family of some thirty persons may have a seventy feet long house. Unlike the Mishings, the Deuris have partitions in the house. The house are usually constructed lengthwise from east to west and the doors always open to the east. There is a covered or uncovered porch at the front of the house called 'Misso' which is kept open on three sides and visitors are usually entertained there. The house being long, there is one inner corridor through which the people can pass to the interior parts of the house. There is a separate fire place for each of the compartments. The fire place at the rear room of the house is considered as private and outsiders and visitors are not allowed to enter this fire place. From the front porch an open air platform extends southward which is used for drying paddy, fish and other sundry works of the household.

3. Family :

3.1. There are mainly two types of families (Jupa) found among the Deuris, viz.-(i) nuclear family (Sukia jupa) and (ii) joint family (Jakarua jupa). The nuclear family consists of a man, his wife and his unmarried children, occupying a single residence. A joint family is composed of two or more married brothers with their wives and children, unmarried brothers and

sisters, parents or grand parents occupying a single residence. The Deuris usually prefer joint family system. However, now-a-days, this joint family system is gradually losing its strength. The father is the head of the family and all the members obey his orders. As their descent is patrilineal and residence is partilocal the eldest male member in the family also become its head and he takes the sole responsibility in smooth running of all domestic affairs.

4. Clan :

4.1. The four broad territorial groups of the Deuris, namely - Dibongia, Tengapaniya, Borgonya and Patragonya are composed of a number of exogamous clans locally termed as Jakus. The members of a Jaku believe that they have originated from a single mythical progenitor. However, the clans are not totemistic. There are altogether 14 Jakus among the Dibongia Deuris. These are (i) Sundariyas, (2) Patriyas, (3) Chariyas, (4) Lagasuyas, (5) Chitigayas, (6) Airiyas, (7) Kumatayas, (8) Murangs, (9) Sukrangs, (10) Telias, (11) Dupias, (12) Kaliachakus. (13) Mehedayas and (14) Bihiyas³. The inhabitants of Nam-Deuri village belong to the Dibongia group of Deuris. But all these clans are not found in Nam-Deuri village. The following are the names of main clans found in the village - (1) Sundariyas, (2) Airiyas, (3) Kumatayas, (4) Sukrangs, (5) Mehedayas. There are also a few other small clans, namely Mitchayo, Telia, which were originated later due to intermixture with Nam-Deuri people.

4.2. There is no system of social ranking among the Dibongiyas. All the clans have equal social status. However, in practice the original seven clan groups gets higher status. * Telia, Dupia, Sukrang, Mitchayo, Murang, etc. have less importance in the society as these clans sprang up later. Among the members of priestly council, the Boderi gets the highest status. The priestly council has the entire responsibility for the welfare of the village, for the well being of the domesticated birds and animals and so also the bumper crops.

4.3. The Sundariya clan is to provide person for the office of the Boderi or Bordeori (Chief priest) whose main duty is to sacrifice all the votive offerings like goats, ducks, pigeons, pigs, etc. on ritual occasions inside and outside the village shrines. If such a suitable person is not available in the

3. Saikia, P.C. (1976) : The Dibongiyas, B.R. Publishing Corporation, Delhi. *The priestly council usually comprising of seven members from seven clans e.g. Sundariya, Chitigaya, Chariya, Patriya, Airya Lagasuya and Mehedaya, having higher social status, than other clans

Sundariyas clan, then a person from Airiyas or Kumataya clan is selected for the office of the Bor-bharali to conduct rituals in the shrines. In the absence of Bor-bharali, Saru-Bharali can perform the duty of the former. During animal sacrifices, the Bor-bharali and Saru-bharali hold the head and legs of animals respectively.

4.4. The Patriya clan is to provide person for the office of the Saru-Deuri or Sadari, whose main duty is to assist the Boderi. In the absence of the latter, the former is empowered to perform the duty of the Boderi. The members of Chariya clan are bound to supply the priestly council with a man for the office of the Bora, whose main duty is to collect fuel and dues from the villagers on ritual occasions. Thus, different clans have entrusted with different duties for the smooth functioning of their day-to-day socio-cultural activities.

5. Marriage :

5.1. The marriage among the Deuries is regulated by moiety and clan exogamy. If any one violates this social prescription, he is punished by the priestly council of the village. Monogamy is the general rule, but second wife is allowed if first one has died or proved childless. Child marriage is unknown to the Deuris. Once a girl is married she belongs to her husband's family. The children take their father's clan name. The system of levirate and sororate are not in existence among the Deuris.

5.2. Two types of marriages are usually prevalent among them. They are - (1) marriage by elopement and (2) Negotiated marriage. In elopement marriage the boy is helped by his immediate consanguineal relatives and his friends in taking out the girl from her parents' residence on an appointed date. Elopement marriage is widely prevalent in Deuri society. No any formal ceremony is performed in such marriages. This type of marriage is ultimately regularised with a ritual known as Sugen-Lehuruba* or Melonf which is performed at the residence of the bride's

*In performing this ritual, both the parties belonging to the bridegroom and the bride, participate in a liberal distribution of rice (sugen) on the day of the celebration of the wedding rites. In fact, the civil part of the marriage ceremony consists of the offering of sugen and Kaji. Sugen is a part and parcel of the social life of the Dibongiyas. It is not only necessary to entertain guests in all the socio-ritual gatherings, but also essential to perform offerings to all the deities, ancestral manes and other supernatural beings.

parents, at a time convenient to the bride-groom.

5.3. The negotiated marriage is a bit elaborate and expensive. After the informal negotiation a day is fixed for the final and formal negotiation. On that day the guardians of the boy visit the bride's family with two earthen jars of rice beer traditionally carried on a beam. The jars of the rice beer can be carried only by such a person whose parents are alive. The jars are to be beautifully covered with plantain leaves. On the neck of the first jar a bundle of betel leaf and nut (tamol) is fastened which is meant for the bride's parents and her co-villagers. On the neck of the second jar three bundles of tamol-pan are to be fastened. The biggest bundle is meant for Midiku i.e. temple. The second bundle is for the bride's parents and the third one is meant for the co-villagers of the bride. The first jar of rice beer is served on that day to the honoured guests and the members of the host's family. The other jar of rice beer is consumed on a subsequent day by the co-villagers and the kith and kin of the girl at the invitation of the bride's family. The first bundle of tamol pan attached to this jar is preserved in the family and it is handed over to the co-villagers on the day of marriage. The other two bundles of tamol pan are consumed on the day on which the rice beer of the jar is consumed.

5.4. The marriage ceremony is observed, usually, for two days. On the second and final day of marriage, a feast is ready, the bridegroom and his party who arrive and take rest in a nearby family in the village (in the case of a bridegroom from a separate village) is informed of. The groom then has his bath and put on bridal apparel and start for the bride's residence along with parents and other members of his party. The bride's party welcome them. They are entertained with the feast. The members of the bride's party also partake feast along with the groom's party. The important items of feast are a pig, a hen, fish and rice beer. When the feast is over, the groom and his bride are taken inside the Chang where they have seek blessings of the parents of the girl and other senior kith and kin including the elder brothers of the girl. With this the ceremony at the bride's place comes to an end.

5.5. The bridegroom and the bride and other members of the groom's part leave for the groom's home after completion of the

functions at bride's place. It is almost obligatory on the part of the groom's party to leave the bride's place as soon as the functions are over at the house of the bride. Even at late night they start for groom's residence. In the groom's place also a feast is arranged and everybody invited are entertained. After the entertainment, the groom and his bride have to bow-down to the parents of the groom and other senior kith and kin for blessings. With . function of the formal marriage ceremony is completed.

5.6. The system of bride price is prevalent among the Deuris, which cannot be considered as dowry. Dowry is given only as gifts as a token of love. It includes mainly brass-matel utensil, wooden or steel boxes, garments and cloths, arecanuts and betal leaves etc., while bride price paid by the groom varies between Rs. 100 and Rs. 300 and sometimes even less. Deuri traditional negotiated marriage, however, is a costly affair entailing expenditure on sumptuous feasts and consumption of large quantities of rice-beer (Sujen) continuously for two to three days to a large number of guests.

5.7. Widow remarriage is allowed in the Deuri society. Divorce on specific grounds is socially allowed. But the senior members of wife's side as well as the husband's side must be satisfied with the reasons of the proposed divorce. Actual divorce comes into force only with their consent.

5.8. Inter-tribe marriage, though not encouraged, but do taken place in the Deuri society. There are few cases of inter-tribe marriage with the Mishings. Such marriage is to be regularised through a function called Buri Biya and thus the girl is adopted in the clan and tribe of the boy. Besides other plains tribes, marriage with other Hindu castes is also allowed in the Deuri Society.

6. Adoption of Child :

6.1. Adoption of a child is prevalent in the Deuri society. Adoption of a child both male and female even from other tribe or castes is allowed. There are some cases of adoption of Mishing (tribe) and Chutiya (caste) children in Nam Deuri Gaon. These children, mostly orphans were adopted from nearby villages. Utmost care has been taken by the adopters to keep the adopted sons and daughters completely in dark about their actual parents.

6.2. Such an adopted child enjoys all the social and family status of a common Deuri child. An adopted son enjoys the right to inherit property from his foster parents. He can even offer 'pindo' (oblations) to his foster parents provided he is ceremonially adopted in the clan and tribe of his foster father. Even if a child from a different Deuri clan is adopted he is to be ceremonially adopted in the clan of his foster parents. The adoption is to be formally declared to the villagers in proper time. This simple ceremony and declaration serve as valid ground of legal and social adoption which cannot be violated by either party in any case.

7. Inheritance of Property :

7.1. Both movable and unmovable properties, such as land, livestock, food stuff, house etc. are held jointly under the head of the family. After the death of the father, his sons becomes the rightful owner of his properties which are equally divided among his sons. In case of a man who dies without any survivor, his property usually goes to the nearest agnatic relatives. The wife and daughters are not eligible to share the property. An adopted son also has equal right over the property of his foster parents. Daughters, after their marriage can take away all the clothes they woven and the cash they earned by selling pigs, fowls, goats etc. at father's residence. As the Deuris are patrilineal in descent, they count their relationship through male line.

8. Religious Belief and Practices :

8.1. The Deuris are still maintaining their traditional belief and practices. However, the influence of Vaisnava Gosains is visible in the Deuri villages, but the trend towards traditional belief is still prominent. The common place of village shrine is known as 'Midiku' (Than). In the Dibongia Deuri tongue, Midi denotes deity and Ku means house or abode. Literally, it signifies the abode of the deity. They worship Siva and Parvati as their deities and they call Siva-Parvati as Kundi-Mama. Kundi is identified as Siva and Mama as Parvati of Hindu Pantheon. Another name of these chief deities is 'Gira-Girachi'.

8.2. Besides the major deities, the Deuris have a good number of household deities. They believe that if these deities are appeased properly, then peace and plenty will prevail upon the households. Sacrifices of animals, fowls, pigeons etc. are offered

to these deities. The presence of Boderi is essential in performing the rituals. The other office-bearers, such as Bor-bhorali, Saderi, Saru-Bhorali etc. also assist the Boderi at the time of ritual held in the village shrine.

8.3. The following are some of the important rituals performed by the Deuris at different times and occasions : (1) Metua and Bormetua, (2) Sat-Labiruba, (3) Chak-Chik (Chaibanga), (4) Makaq Chibba, (5) Chua-Lubiruba, (6) Rajkebang, (7) Mino-Hararuba, etc.

8.4. Besides the above mentioned rituals, many other rituals are performed by the Deuris to cure sickness. They believe that in sickness, if some one approaches a doctor for treatment without performing the traditional rituals, the consequence might be fatal. It is a fact that, a Deuri even today, first approaches a Dundai (village medicine man) for getting remedy for his ailment, who usually advises him to perform certain rituals to recover from illness.

9. Festivals :

9.1. The most important festivals of the Deuris is Bihu or Bihu. The term Bisu is probably derived from the Chutiya word 'su' meaning rejoicing, prefixed by 'Bi' meaning extreme or excess. Etymologically, 'Bisu' may mean supreme occasion for rejoicing and merry making.

9.2. The Deuri observe two major festivals during a year, viz. (1) Bohaqiya Bisu (Bohaq Bihu) and (2) Maqiyo Bisu (Magh Bihu). Bohaq Bihu is considered as a festival of unrestricted joy and merry making. The priestly council performs Bisu Puja on the first Wednesday of the month of Bohaq (April/May). Ancestor worship is also a part and parcel of the Bohaq Bihu which is generally performed on the first Tuesday of the month of Bohaq. On the following Sunday, Borboli is performed in the village shrine with the sacrifice of goat, chicken, pigeons etc. The sacrifice of the animals inside and outside the shrine is done by the priestly council of the village. Hunsori dance is performed on the day of Borboli also. Consumption of rice beer outside the shrine but within the campus of the shrine is a common sight on the this occasion. "Deodhoni Utha" is also a part of the Borboli, In this a lady or two dance widely to the tune of the drum beating. It is believed that the dancers at that time gets certain super-natural power and can fore-tell the future of man as well as answer

correctly to any question put to them

9.3. During Bihu the elderly villagers visit all the households in the village and they bless the inmates of the households. The members of each household entertain them with Sujen (rice-beer) and Kaji (meat curry). Hunsori is also performed, first at the village shrine and then at the residence of the head priest (Boderi). The Hunsari party blesses the members of the household for a prosperous year. Drums, small cymbals (Tal), bamboo pipe etc. are the main musical instruments of the Hunsari party. The rhythmic dance accompanies melodious Bihu songs.

9.4. Similarly, Magiyo-Bisu or Magh Bihu also plays a dominant role in the socio-religious life of the Deuris. It commences on the first Wednesday of the month of Magh (January/February). Propitiation of deities in the village shrine is done by the priestly council in the occasion also. Drinking, eating, singing and dancing etc. are the main features of this festival. By celebration of Bihu, they also bring about intra and inter-village solidarity among themselves. These Bihu festivals have close relation with their agricultural activities. The Bohag Bihu is observed before starting the agricultural operation while the Magh Bihu is observed after harvesting of the paddy crops respectively.

10. Disposal of Dead.

10.1. In case of disposal of dead body, the Deuris practise both burning and burial. Generally the dead bodies of children, pregnant women and epidemic cases are buried. Usually when an adult person dies in a natural death is cremated by burning. The pyre is made with seven layers of wood, but for the priest the layer of wood are raised to nine. The traditional custom of laying layers of wood in pyres for a man or a woman was seven layers and five layers respectively. After performing some rites the **corpse** is wrapped with a bamboo mat and carried to the cremation ground in a procession by the relatives and the co-villagers. Food, rice-beer, fire etc. are carried to the cremation ground. The eldest son offers cooked food and rice-beer to the soul of the dead and puts fire in the pyre. Like the other Hindus, the Deuris also observe fast at the death of a person in the family. The members of the family of the deceased observe fast for five or seven or nine days according to the layers of fuel wood given in the funeral pyre.

10.2. A ceremony known as Sujen Luburuba is held on the fourth day in which rice-beer and chicken curry is usually offered to the soul of the deceased and request the soul to give up all the connection with the inmates of the deceased. The son offers oblation consisting of rice beer and curry at the backyard of his house for the welfare of the family, domesticated birds and animals and also for bumper crops.

10.3. The Daha or Kaj is the final mortuary ritual of the Deuris. As this ritual is an expensive affair, they observe it when they can afford. The ritual requires a large number of chickens and pigs, huge quantities of rice, rice-beer, areca nuts, betel vine leaves etc. Generally, it is held after one year.

53. Role of Contact Farmers on Transfer of Technology to Follower Farmers under the T & V System.
(A Study in Sibsagar District of Assam) (Mimeographed)
54. Intensive Jute Development Programme (IJDP)
(A Study in Nowgong District, Assam) (Mimeographed)
55. Production and Marketing of Pineapple in Meghalaya
(A Study in East Khasi Hills District) (Mimeographed)
56. Management of Social Forestry in Assam (A Case Study : 1984). (Mimeographed)
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58. Impact of Indo-British Fertilizer Education Project (IBFEP) in Agricultural Production, 1985. (Mimeographed)
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