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INTEGRATED RURAL DEVELOPMENT

(I. R. D.)

HISSAR (Haryana)

Part I General survey of villages around Bhuna, Hansi and Bhattu Kalan

II Socio-economic status of rural poor women of villages around Bhuna

III Income and employment status of rural poor around Bhuna

VOLUME III

Directorate of Project-cum-Plan Formulation

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PREFACE

The concept of integrated rural development in its true scientific meaning has gained momentum only during the past few years. There is a general consensus that the economic, social and cultural development in the country ultimately hinges on the development in the rural areas. Since, about 80 per cent of the population of the country lives in rural areas and regarded as a productive force, it, therefore, becomes incumbent on the policy makers to draw consumption schedules suiting to the needs of the rural population, otherwise overall economic growth of the country is bound to remain stagnant. Further, there is a general recognition all over the world that the per capita national income and GNP fail to reflect the realities of life. The real development, therefore, should be related to the social objectives of economic growth, such as, redistribution of income, institutional changes, equalization of distribution of development benefits, etc. These should also be linked up with the nation's programme and should tell about the pattern of resource mobilization, quality of life, social integration, stratification and mobility and participation of the different categories of people in the development process.

Still, agriculture occupies the main key to the rural economy, which is yet to come up, so as to feed the starving millions and also to provide jobs for the growing hands. The number of landless labourers and marginal farmers, rather than diminishing, has continued to increase. The size of land holdings has become smaller and uneconomic. The socio-economic disparities have been growing. In post-independent India, many efforts have been made to accelerate the pace of rural development. Such efforts have led to the postulation of various conflicting theories and approaches to rural development and, in return, have confounded rather than solved the problem of accelerating rural development. The solution lies in joint and integrated rather than isolated efforts. Effectiveness of a strategy of rural development, therefore, hinges, to a great extent, on the correct identification of constraints and accelerators of development and participation of the rural people.

Thus, it is obvious that the rural development imposes a change in the socio-economic systems. To begin with all the socio-economic barriers and accelerators of rural development within an area need to be diagnosed properly. The available local resources - physical and human both - are the very powerful accelerators of economic development. As such, their scientific appraisal and analysis need

to be done. Based on this analysis, important maladies need to be located and their probable solutions have to be found out. To bring about an all-round development in rural areas, a functional as well as spatial integration of all socio-economic activities, viz., agriculture, animal husbandry, small scale and cottage industries, health, education, transport and communication, drinking water, rehabilitation, banking etc. is essential.

Sometimes, the reality in the rural areas may be found to be rather illusive, when concepts and ideas are framed while sitting in ivory tower. It is, therefore, necessary to plan from the grass root level for a balanced growth of all regions and all sections of our population. It has been felt that the plans should be drawn at the Block level and that, too, through the participation of people of the area. With this idea in view, our first attempt was to prepare an Integrated Resource Inventory for Hissar district, which was issued as Volume I and released in December, 1977. Volume II of the report, released during January, 1978, deals with Block-wise Inventory of Resources and Malady-Remedy Analysis. The very purpose of the present report (Volume III) is to have a deep insight into the different socio-economic and other problems of the three agro-climatic regions of the district; to measure the level of employment and income of the rural poor, particularly, small and marginal farmers, landless labourers, rural artisans and women below the poverty line; to find out the point of departure with reference to employment and income of the weaker groups; and to work out the gaps which are to be bridged through the Integrated Rural Development Project.

Since the main thrust of the Integrated Rural Development is to provide opportunities for gainful employment to the rural destitutes, therefore, quite a new approach to planning, administration & field execution has been called for by our Prime Minister, Shri Morarji Desai. But it is feared that, in the absence of proper project planning and implementation, employment guarantees may result in colossal wastes of public money and enthusiasm and, like Community Development, larger benefits of the programme will also be appropriated by the vested interests and the rural elites to their advantage by manipulating and maintaining an iniquitous society. Therefore, the proposed programme of IRD should imbibe more flexibility, comprehensiveness, geographic and sectoral integration, widest possible discussion and debate different groups and sub-groups and a constructive initiation of

participatory process in development through mass mobilization and involvement.

The whole process calls for proper resource planning, development of organisational infrastructure to implement the programmes, provision of training to develop skills and local leadership and also strengthening the financial base through closer tie-ups with banks to ensure adequate working capital and term loan requirements. At the same time, it is essential that various groups constituting the village community should be given pride and dignity that they deserve. Before formulating any programme for their upliftment, it is worthwhile to know about their various activities, liking for different trades, aptitudes towards innovations and socio-cultural values which can influence the process of development. Keeping these facts in view, a socio-economic survey was conducted. The whole study is divided into three parts: Part I deals with general survey of three clusters of 30 villages each representing three distinct agro-climatic conditions of the district. Part II studies the socio-economic status of rural poor women of 30 villages around Bhuna, and Part III enquires into the levels of employment and income of rural poor of the same 30 villages around Bhuna. The schedule and questionnaire used for collecting different types of information are also given in the appendices.

We hope that this report will be of considerable help to the scientists, planners, administrators, politicians and others striving for the Rural Development.


We express our grateful thanks to Dr. P.S.Lamba, Vice-Chancellor, Haryana Agricultural University, with whose inspiration, encouragement and unstinted support this report has been prepared.

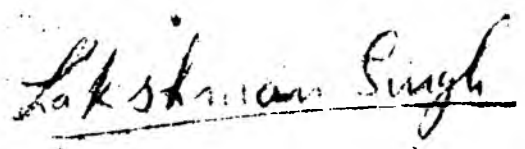
We would be failing in our duty if we do not thank Dr. M.S.Swaminathan, Director-General, ICAR, and Shri R.N.Azad, Jt. Secretary (Rural Development), Ministry of Agriculture and Irrigation, Government of India, for providing necessary funds and encouragement for the purpose. The help extended by Shri I.E.Soaes, Officer on Special Duty, Government of India; Shri L.D.Kataria Secretary, Government of Haryana; Dr. J.C.Sharma, Director of Extension Education, HAU; and Shri Prem Prashant, Deputy Commissioner, Hissar, is also gratefully acknowledged. The staff of the Department of Agricultural Economics deserve our appreciation for helping us in the calculation of the data.

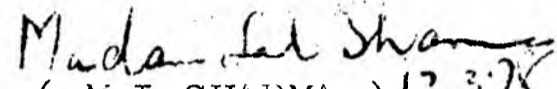
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I

GENERAL SURVEY OF VILLAGES AROUND BHUNA, HANSI AND BHATTU KALAN

In the past, one expected that the heavy investment on development projects would increase agricultural production which is a base for industrial development. It was expected that the benefits of the income growth will percolate down to the rural masses and the sustained progress of the country would result in the eradication of poverty and reduction of unemployment. Reduction of inequalities in income and wealth and a more even distribution of economic power was the ultimate goal. Due to lack of understanding of intricacies of the problem of poverty and poor institutional and structural arrangements for proper implementation of the programmes, the task could not be fulfilled.

Still there are millions of people, ill-fed, ill-clad, and ill-sheltered - the people who have been neglected for centuries under colonial and pre-colonial rules. Their world is too narrow - limited to villages, hamlets, and castes. Their burning problems - food, clothing and shelter - the three basic necessities of life, are not satisfied. It is estimated that about 55 per cent of the rural population still continues to be below the poverty line. Poverty makes a vicious circle of poor health, poor productivity and under-nourishment. Rural development would mean the removal of all these evils and improving the quality of life of the people. However, it is highly essential that the involvement and participation of these people in all programmes of rural upliftment is ensured.

Experiences of 25 years of planning and a careful scrutiny of the past programmes have indicated that the whole concept of planning is to be modified and the plans must start from the grass-root level. The new approach

envisages proper identification of constraints, assessment of all available resources and measurement of developmental potentiality of an area for which planning is to be done. Before planning any project study of the magnitude of the problem and measurement of the existing gaps is essential. With this view in mind and to ensure an active involvement and participation of the people in their own programmes for development, a socio-economic and general survey of 90 villages was undertaken.

The main idea behind conducting the socio-economic and general survey of these villages was to identify and to locate the different weaker groups, their economic activities, different social services and facilities given to the people and to spotlight different developmental potentialities of the area. Specifically, the important objectives of the study were as follows:-

- (i) To examine the population structure in different areas and to find out the employment pattern, particularly, of weaker groups;
- (ii) to assess various institutional facilities and social amenities of region;
- (iii) to study the land-use, cropping pattern and adoption of agricultural technology; and
- (iv) to examine the density of livestock and poultry population and various feeding practices in different areas.

METHODOLOGY

Three clusters, namely, Bhuna, Hansi and Bhattu Kalan, each consisting of 30 villages and representing three distinct agro-climatic conditions of the district were selected for this study. Bhuna, Hansi and Bhattu Kalan were taken as nucleus villages around which 30 nearest villages

were selected, ranging upto 25 km. from the nucleus village. The map of village clusters surveyed around Bhuna, Hansi and Bhattu Kalan is presented in Figures I, II and III, respectively.

DATA ANALYSIS AND DISCUSSION

Soils

Bhuna represents the first zone. Soils of this area are sandy to loamy sand, well drained and moderately eroded. These soils are low in nitrogen, low to medium in phosphorus and medium to high in potassium. Around Hansi, there are two types of areas, i.e., depressional and plain. Soils of the depressional areas are deep, imperfectly drained, dark brown in colour and loam to clay loam in texture. Soils of the plain areas are deep, well drained and sandy loam to loam in texture. Some patches of salt affected soils are also present in this area having high pH and electrical conductivity. These soils are low in nitrogen, medium to high in phosphorus and potassium, and low in zinc. Soils around Bhattu Kalan mainly comprise of sand dunes and plain sandy loam soils. Sand dunes are well-drained, wind eroded and sand to loamy sand. These soils are low in nitrogen, low to medium in phosphorus and medium in potassium, whereas the soils of the plain areas are deeply well drained, sandy loam to loam in texture and are low in nitrogen and medium in phosphorus and potassium.

Area and population

Bhuna cluster stretched an area of 40,605 ha., whereas Hansi and Bhattu Kalan covered 31,735 and 54,406 ha, respectively. The total population of the three clusters, namely, Bhuna, Hansi and Bhattu Kalan accounted for 75,211, 78,579 and 72,984, respectively. Thus, these three clusters combined together occupied nearly one-fifth of the total geographical area as well as about the same proportion of the

Fig. I.

VILLAGE MAP OF BHUNA CLUSTER

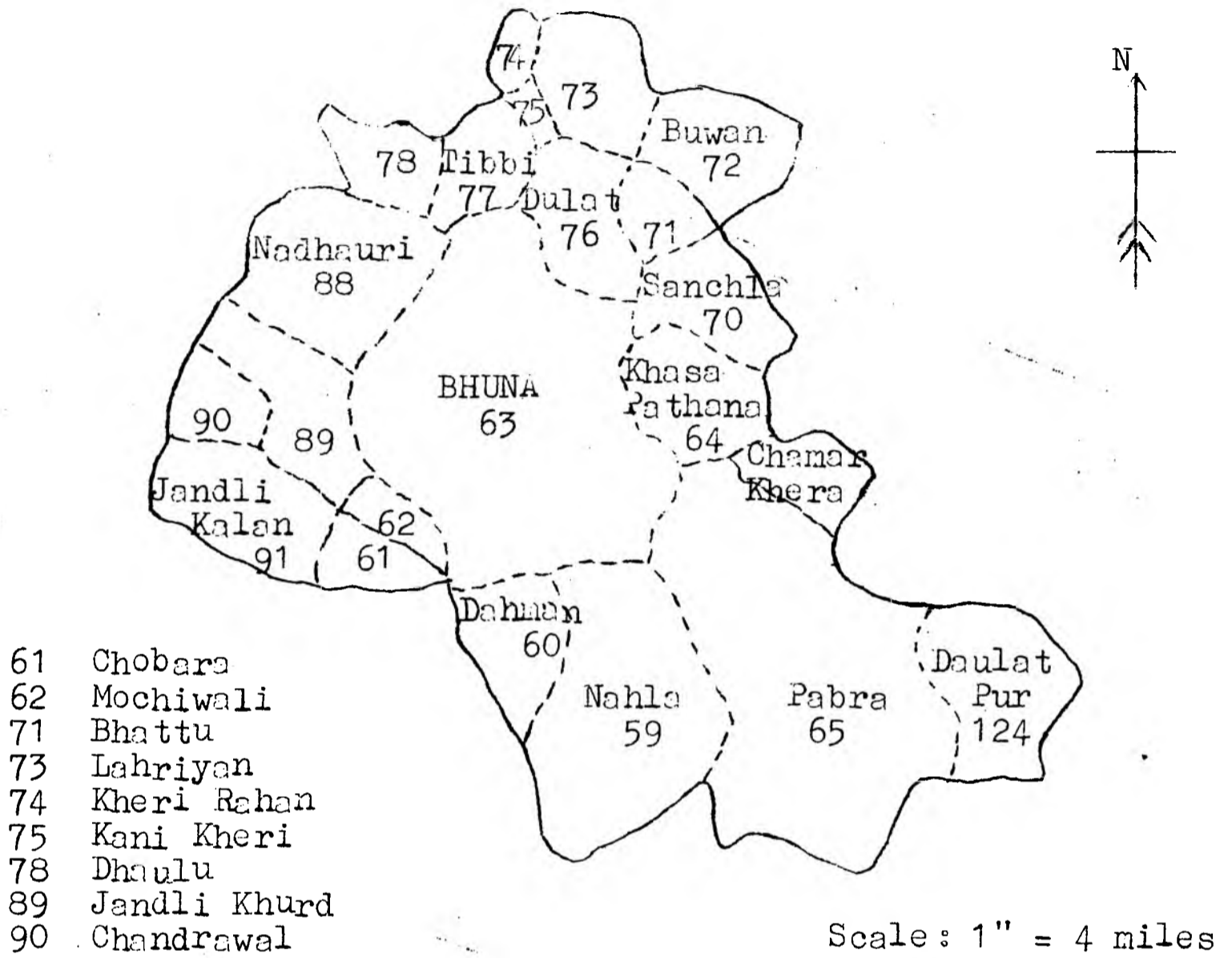


Fig. II.

VILLAGE MAP OF HANSI CLUSTER

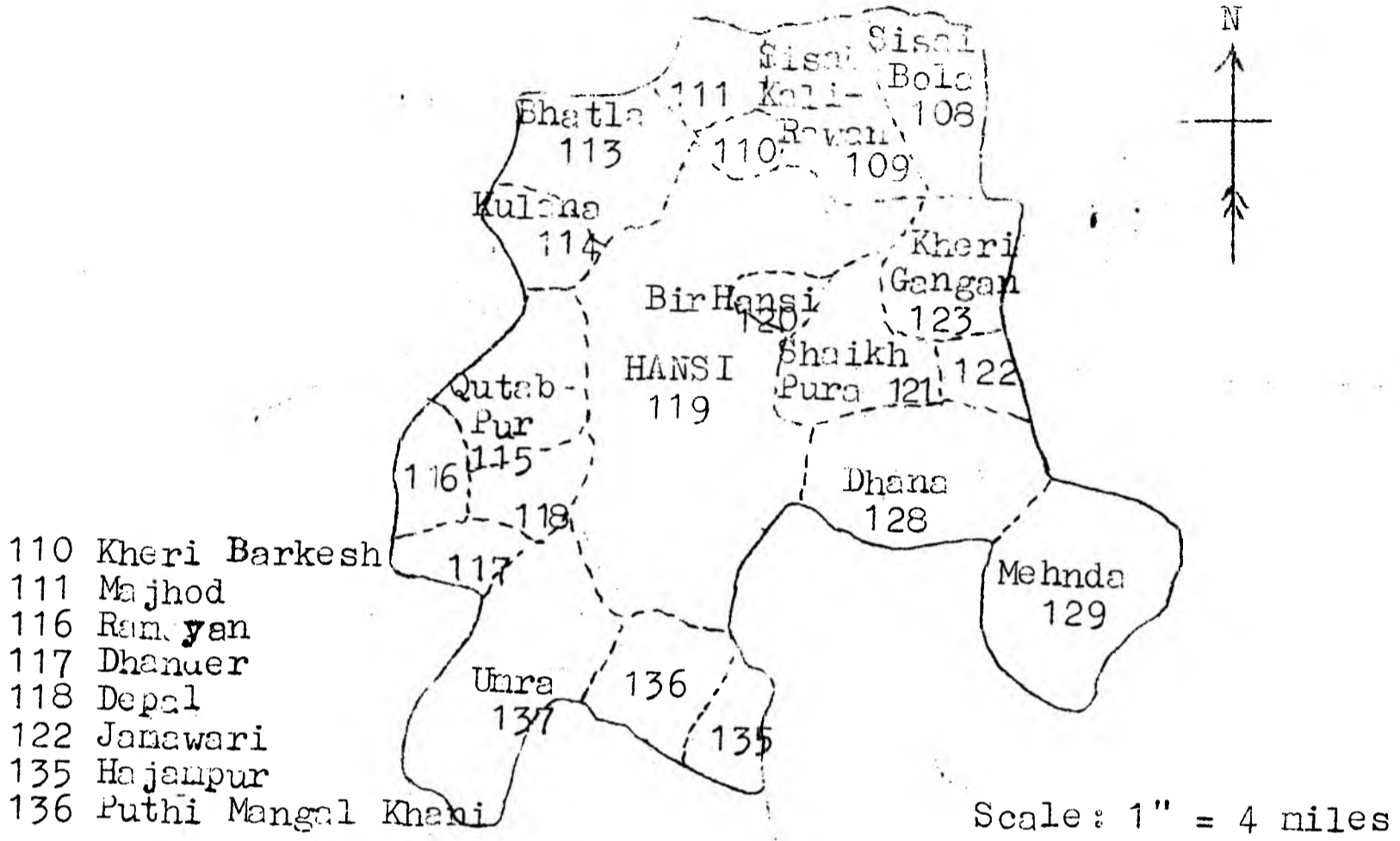
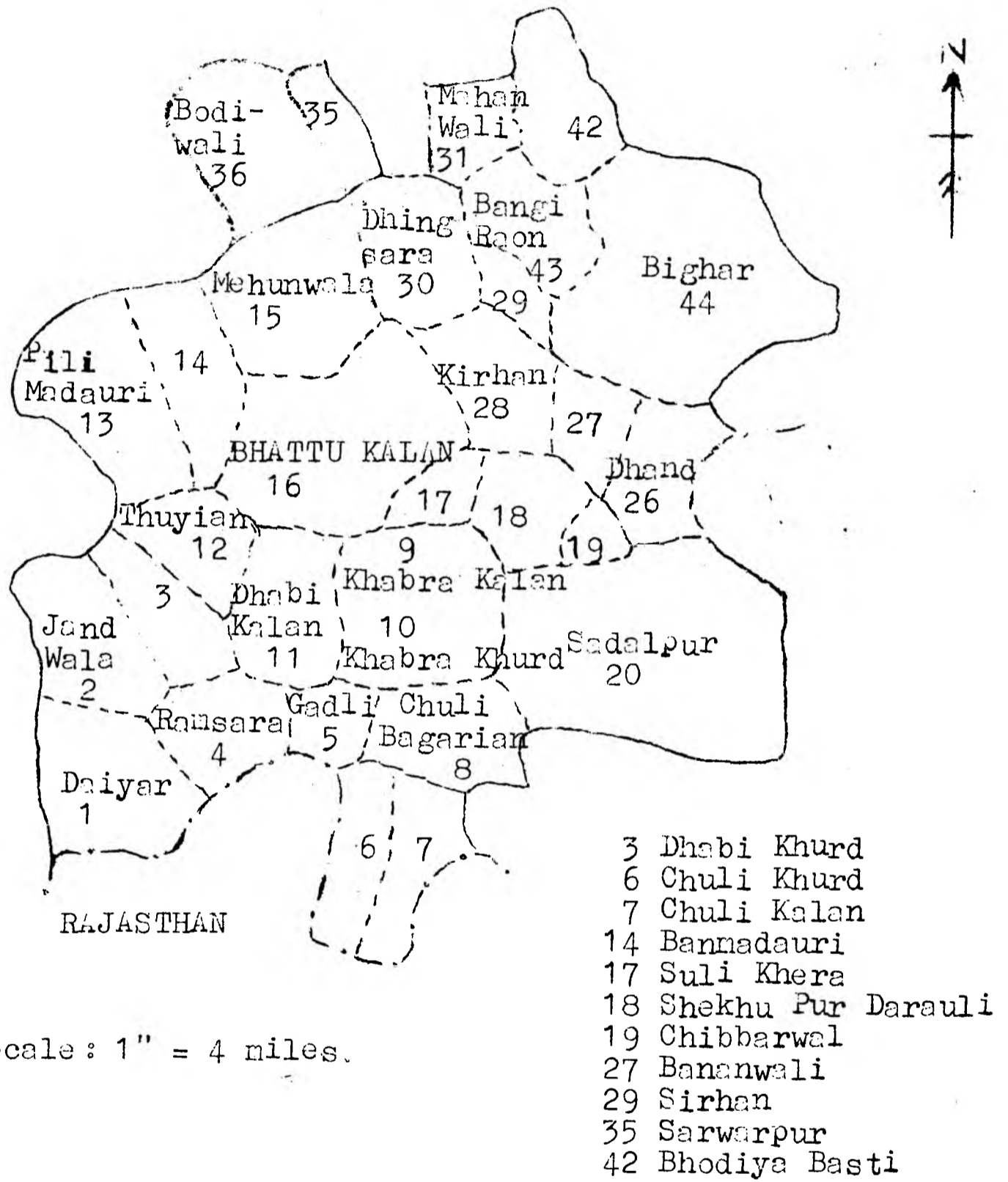


Fig. III.

VILLAGE MAP OF BHATTU KALAN CLUSTER



Scale : 1" = 4 miles.

total population of the district. The average size of the family worked out to be 7.50, 8.16 and 8.02 for Bhuna, Hansi and Bhattu Kalan clusters, respectively. The per capita availability of arable land was 0.49, 0.38 and 0.69 ha. respectively. However, in Bhuna and Bhattu Kalan clusters the arable land was more as compared to district average, i.e., 0.46, whereas in Hansi cluster, it was lower. Table 1.1 gives general information about the three clusters under survey.

Table 1.1 : General information about Bhuna, Hansi and Bhattu Kalan clusters

Sr. No.	Particulars	Clusters			Total
		Bhuna	Hansi	Bhattu Kalan	
1.	Total geographical area (ha)	40605	31735	54406	126746
2.	Total households	10022	9624	9099	28745
3.	Total population	75211	78579	72984	226774
4.	Total cultivated land	36614	28124	50286	115024
5.	Average size of the family	7.50	8.16	8.02	7.88
6.	Per Capita arable land	0.49	0.38	0.69	0.51

In Bhuna cluster, out of 10022 households nearly 91 per cent were cultivators and the rest about 9 per cent landless labourers. Small and marginal farmers constituted nearly 15 and 24 per cent of the total cultivators, respectively. In Hansi cluster only about 60 per cent out of 9,624 households were cultivators and the remaining about 40 per cent landless labourers. Small and marginal farmers accounted for about 31 and 21 per cent of the total cultivators, respectively. In Bhattu Kalan,

out of 9099 households 83 per cent were cultivators and the rest 17 per cent landless labourers. In this cluster, small and marginal farmers constituted about 22 and 28 per cent of the total cultivators, respectively. Thus, the population of weaker groups comprising the small, marginal farmers and landless labourers in Bhuna, Hansi and Bhattu Kalan clusters worked out around 44, 71 and 59 per cent of the total population, respectively. In table 1.2 details of total households, cultivators and landless labourers in each of these three clusters are presented. (See also Fig. IV).

Table 1.2 : Distribution of farmers and landless labourers in different clusters

Particulars	Clusters			Total
	Bhuna	Hansi	Bhattu Kalan	
Total households	10022	9624	9099	28745
Number of cultivators	9109 (90.89)	5792 (60.18)	7552 (83.00)	22453 (78.11)
Small farmers	1340 (14.71)	1803 (31.13)	1698 (22.48)	4841 (21.56)
Marginal farmers	2178 (23.91)	1241 (21.43)	2114 (27.99)	5533 (24.64)
Landless labourers	913 (9.11)	3832 (39.82)	1547 (17.00)	6292 (21.89)

Figures in parentheses show the percentage of small and marginal farmers to total cultivators and percentage of landless labourers to total households.

Since one of the important objectives of this survey was to measure the level of employment of the rural poor, an attempt was made to find out the same with regard to cultivators, landless labourers and rural artisans and the data in this respect are given in table 1.3. It was found that in Bhuna, Hansi and Bhattu Kalan clusters, about 42, 26 and 52 per cent of the total households respectively were fully employed and the rest were employed partially. Out of the total cultivators, nearly

Fig. IV. DISTRIBUTION OF FARMERS AND LANDLESS LABOURERS
IN DIFFERENT CLUSTERS

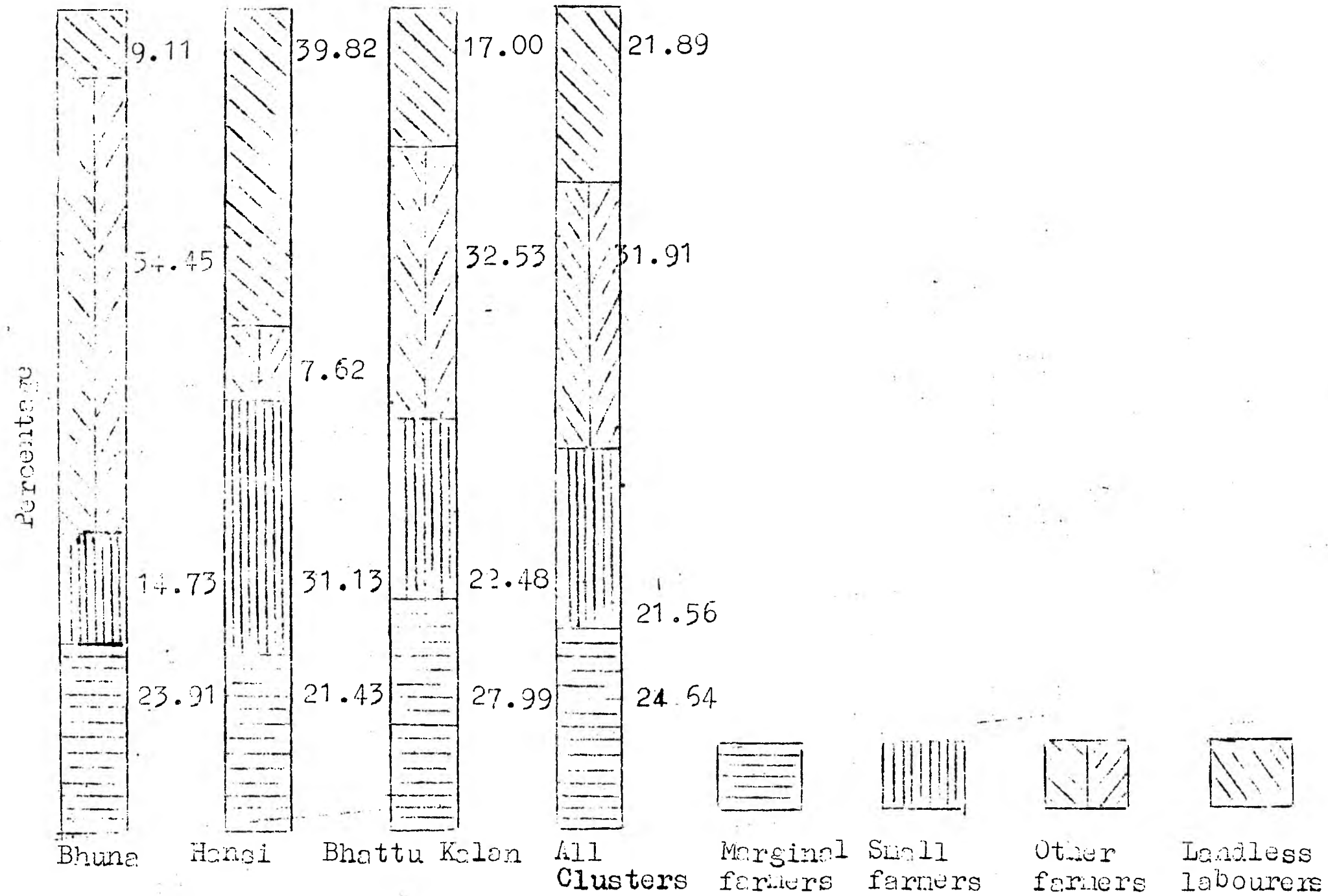


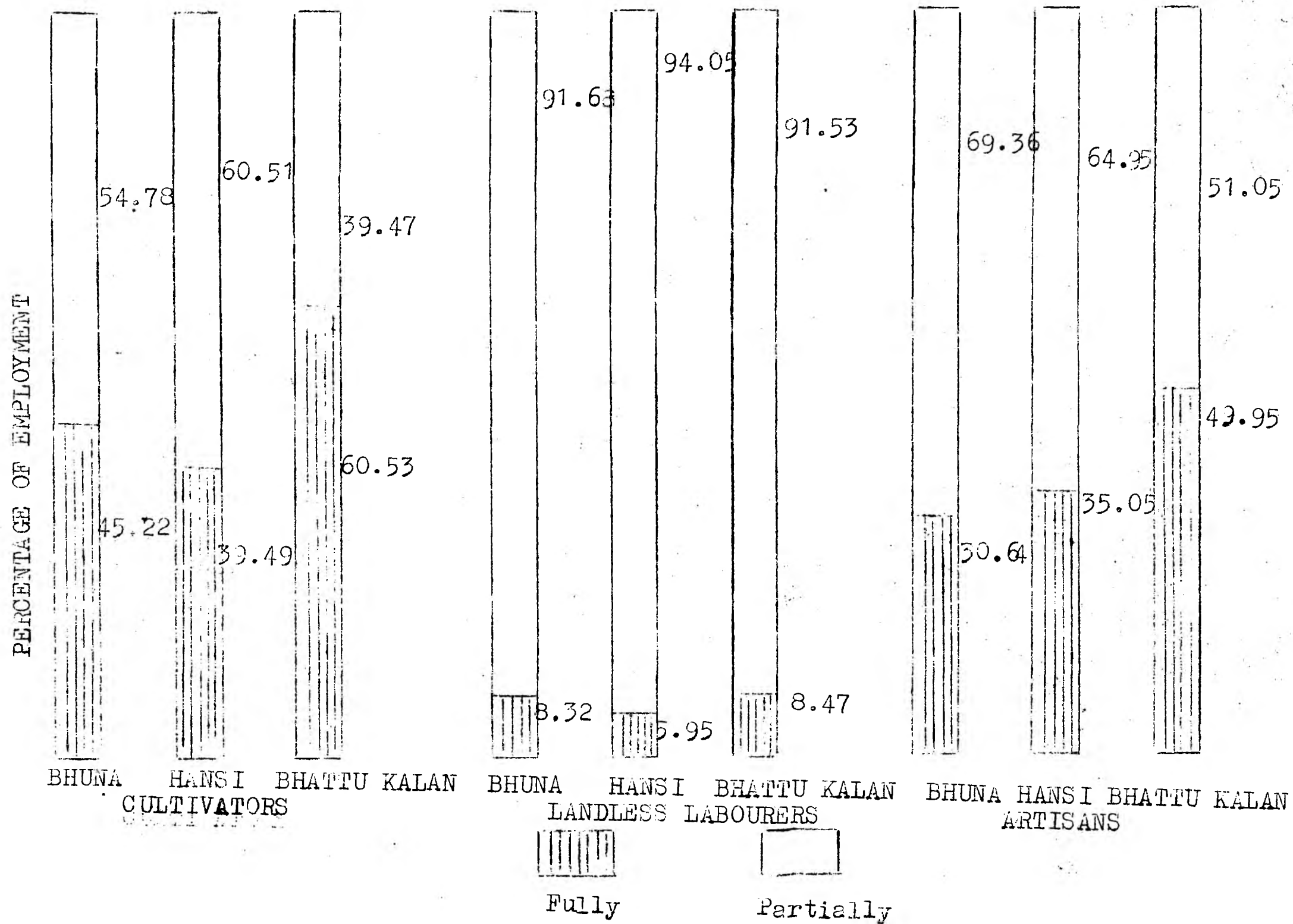
Table 1.3 : Employment pattern in Bhuna, Hansi and Bhattu Kalan clusters

Sr. No.	Particulars	Clusters									Total		
		Bhuna			Hansi			Bhattu Kalan			Total		
		Fully employed	Parti-ally employed	Total	Fully employed	Parti-ally employed	Total	Fully employed	Parti-ally employed	Total	Fully employed	Parti-ally employed	Total
1.	Cultivators	4119 (45.22)	4990 (54.78)	9109 (100.00)	2287 (39.49)	3505 (60.51)	5792 (100.00)	4571 (60.53)	2981 (39.47)	7552 (100.00)	10977 (48.49)	11476 (51.51)	22453 (100.00)
2.	Wageless labourers	76 (8.52)	837 (91.68)	913 (100.00)	228 (5.95)	3604 (94.05)	3832 (100.00)	131 (8.47)	1416 (91.53)	1547 (100.00)	435 (6.91)	5857 (93.09)	6292 (100.00)
3.	Total households	4195 (41.86)	5827 (58.14)	10022 (100.00)	2515 (26.13)	7109 (73.87)	9624 (100.00)	4702 (51.68)	4397 (48.32)	9099 (100.00)	11412 (39.70)	17333 (60.30)	28745 (100.00)
4.	Artisans	235 (30.64)	532 (69.36)	767 (100.00)	225 (35.05)	417 (64.95)	642 (100.00)	281 (48.95)	293 (51.05)	574 (100.00)	731 (40.79)	1061 (59.21)	1792 (100.00)
(a)	Carpenters	75	151	226	89	151	240	71	85	156	225	387	612
(b)	Barbers	47	103	155	51	88	139	85	67	152	183	262	445
(c)	Cobblers	66	202	268	5	55	60	20	40	60	91	117	208
(d)	Blacksmiths	14	48	62	36	48	84	30	25	55	80	121	201
(e)	Potters	30	20	50	40	68	108	70	68	138	140	156	296
(f)	Water Suppliers (Kahar)	3	3	6	4	7	11	5	8	13	12	18	30

Figures in parentheses show the percentage to their respective totals.

FIG. V.

EMPLOYMENT PATTERN IN BHUNA, HANSI AND BHATTU KALAN CLUSTERS



45, 39 and 61 per cent, respectively in Bhuna, Hansi and Bhattu Kalan clusters were reported to be employed fully. The landless households were found to be in very poor condition in respect of employment, as only about 8, 6 and 8 per cent of the total landless labourers in Bhuna, Hansi and Bhattu Kalan clusters, respectively, were employed fully. On an average, about 93 per cent of the total landless labourer households in all the clusters were either under-employed or unemployed. In case of rural artisans, the condition was slightly better. In all, about 42 per cent of the artisans were fully employed. However, in Bhuna, only 31 per cent of them were fully employed as compared to 35 per cent in Hansi and 49 per cent in Bhattu Kalan clusters. Artisans mainly comprised carpenters, blacksmiths, barbers, potters, cobblers and water suppliers (Kahar). The details of each are given in Fig..V.

As regards institutional facilities in these three clusters, enquiries were made and the details thereof are contained in table 1.4. The enquiries covered village institutions and organisations, educational, medical and health, veterinary, and credit and banking facilities available in the area. It was reported that almost all the villages in the three clusters had primary schools. However, three villages around Hansi and one village around Bhattu Kalan were lacking in this regard. The maximum distance between a village and the nearest primary school was 2 km in Hansi cluster. The number of middle schools in Bhuna, Hansi and Bhattu Kalan clusters was 16, 10 and 12, respectively. The maximum distance between a village and the nearest middle school was 5 km in Bhuna and Hansi, whereas, in Bhattu Kalan, it was 8 km. There were five high schools in each cluster and the maximum distance between a village and the nearest high school was 12 km. in Bhuna, 5 km. in Hansi and 11 km. in Bhattu Kalan cluster. For higher education, there was no college in Bhuna and Bhattu Kalan

Table 1.4 : Institutional facilities in Bhuna, Hansi and Bhattu Kalan clusters

Institutional facilities	Clusters						Total number of various institutions (total :col.2,4&6)
	Bhuna		Hansi		Bhattu Kalan		
	Number	Maximum distance (kn.)	Number	Maximum distance (kn.)	Number	Maximum distance (kn.)	
1	2	3	4	5	6	7	8
A. EDUCATIONAL							
1. Primary school	30	-	27	2	29	1	86
2. Middle school	16	5	10	5	12	8	38
3. High school	5	12	5	5	5	11	15
4. (a) College	-	39	1	12	-	28	1
(b) Training Centre	1	20	4	12	-	28	5
B. VILLAGE INSTITUTIONS							
1. Panchayat	30	-	31	-	30	-	91
2. Co-op. Soc.	27	4	26	5	25	3	78
3. Youth Club	2	-	5	-	4	-	11
C. MEDICAL INSTITUTIONS							
1. Primary Health Centre and Dispensary	8	10	5	11	6	15	19
2. Vety.hospital	3	14	4	12	2	15	9
3. A.I. Centre	2	14	2	12	1	15	5
D. CREDIT/BANKING FACILITIES							
1. Primary Agril. Co-op.Society/Mini-Bank	19	5	15	12	22	5	56
2. Central Co-op. Bank	1	23	1	12	1	13	3
3. Primary Land Dev.Bank	-	27	1	12	-	28	1
4. Com. Bank	4	14	9	12	1	13	14

clusters, but in Hansi cluster, there was a college located near Hansi at a distance of about 4 km. on Hansi-Delhi road. The maximum distance between a village of these clusters and the nearest college was reported to be 39 km. in Bhuna, 12 km. in Hansi and 28 km. in Bhattu Kalan. Facilities for technical training in different trades and crafts were available only in Hansi where there were four training centres. In Bhuna cluster, there was one training centre for women only, whereas, in Bhattu Kalan, there was no such facility at all.

Almost all the villages in the three clusters had their own Panchayats. The number of cooperative societies was 27, 26 and 25 in Bhuna, Hansi and Bhattu Kalan clusters. Youth organisations in these areas were reported to be very few. There were two Youth Clubs in Bhuna, five in Hansi and four in Bhattu Kalan clusters. Enquiries about public health and medical facilities available to these villages were also made. In Bhuna and Hansi, there were two Primary Health Centres in each, whereas in Bhattu Kalan only one. The total number of medical institutions including Primary Health Centres and Rural/Ayurvedic Dispensaries, was 8 in Bhuna, 5 in Hansi and 6 in Bhattu Kalan. A Civil Hospital was located at Hansi, but the other two clusters did not have. The maximum distance between a village and the nearest medical aid centre was ten km. in Bhuna, eleven in Hansi and fifteen in Bhattu Kalan clusters. Veterinary aid centres in all the three clusters were inadequate as their number was three in Bhuna, four in Hansi and only two in Bhattu Kalan. Sometimes, a livestock owner had to travel as far as 14 km. in Bhuna, 12 km. in Hansi and 15 km. in Bhattu Kalan. However, in each of the three clusters, there was one veterinary hospital. With regard to artificial insemination facilities, there were only two centres in each of Bhuna and Hansi clusters, and only one in Bhattu Kalan cluster.

With regard to credit and banking facilities for the villagers, there were 19 mini-banks in Bhuna, 15 in Hansi and 22 in Bhattu Kalan clusters. Some of the villagers in Hansi cluster had to cover a distance of about 12 km. to approach their mini-bank. In each of these three clusters, there was one branch of the central cooperative bank. In Bhuna cluster, a few villages were located as far as 23 km. away from the central cooperative bank. Primary Land Development Bank was found only in Hansi cluster. In other two clusters, namely, Bhuna and Bhattu Kalan, it was situated at a distance of 27 and 28 km., respectively. There were four commercial banks in Bhuna, nine in Hansi and only one in Bhattu Kalan clusters. In this way, the area around Bhattu Kalan was least served with banking institutions. However, the maximum distance between a village and the nearest commercial bank was 12 to 14 km in the three clusters.

Land utilization

Land utilization pattern of an area indicates the extent to which available agricultural resources are harnessed for the benefit of agriculturists. As such, the land utilization pattern of the three clusters has been shown in table 1.5. It was observed that nearly 90, 89 and 93 per cent of the total geographical area was under plough in Bhuna, Hansi and Bhattu Kalan clusters respectively. Practically, there was no culturable waste or area under the forest in the three clusters which may be seen through Fig. VI. Net irrigated area as percentage to net area sown was about 75, 91 and 46 in Bhuna, Hansi and Bhattu Kalan clusters, respectively. As such, the cropping intensity was nearly 133, 141 and 122 per cent for Bhuna, Hansi and Bhattu Kalan clusters.

Table 1.5 : Land utilization pattern in Bhuwa, Hansi and Bhattu Kalan clusters (1975-76)

Sr. No.	Particulars	Clusters			Total (ha.)
		Bhuwa (ha.)	Hansi (ha.)	Bhattu Kalan (ha.)	
1.	Total geographical area	40605	31735	54406	126746
2.	Unculturable waste	718 (1.77)	457 (1.44)	312 (0.57)	1487 (1.17)
3.	Land put to non-agricultural use	3188 (7.85)	3077 (9.70)	3803 (6.99)	10068 (7.94)
4.	Fallow land	85 (0.21)	77 (0.24)	105 (0.19)	267 (0.21)
5.	Net area sown	36614 (90.17)	28124 (88.62)	50286 (92.43)	115024 (90.75)
	(i) Irrigated	27614 (75.42)*	25531 (90.78)	23117 (45.97)	76262 (66.30)
	(ii) Unirrigated	9000 (24.58)*	2593 (9.22)	27169 (54.03)	38762 (33.40)
6.	Area sown more than once	12035	11489	11184	34708
7.	Cropping intensity	132.84%	140.85%	122.24%	130.17%

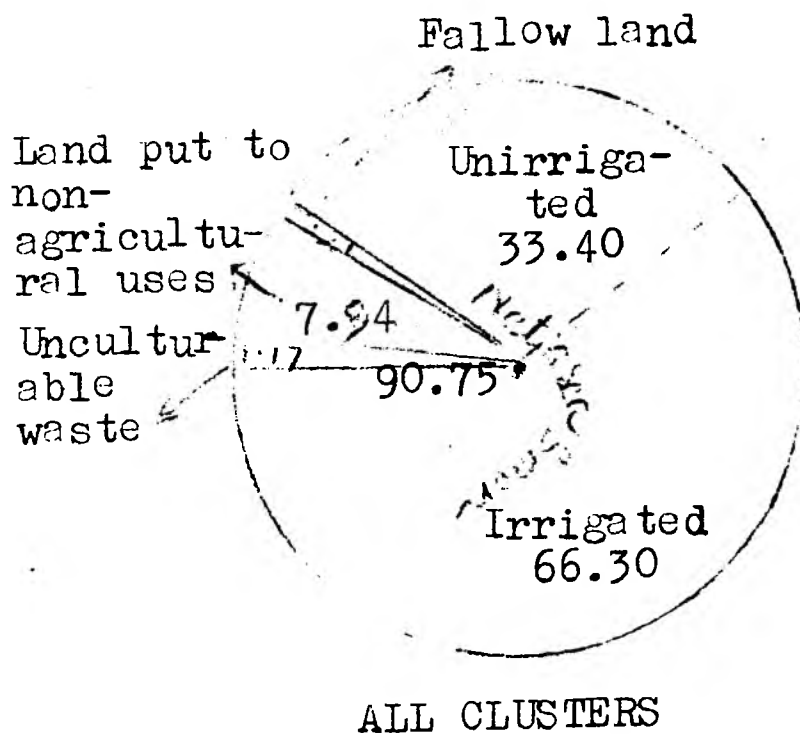
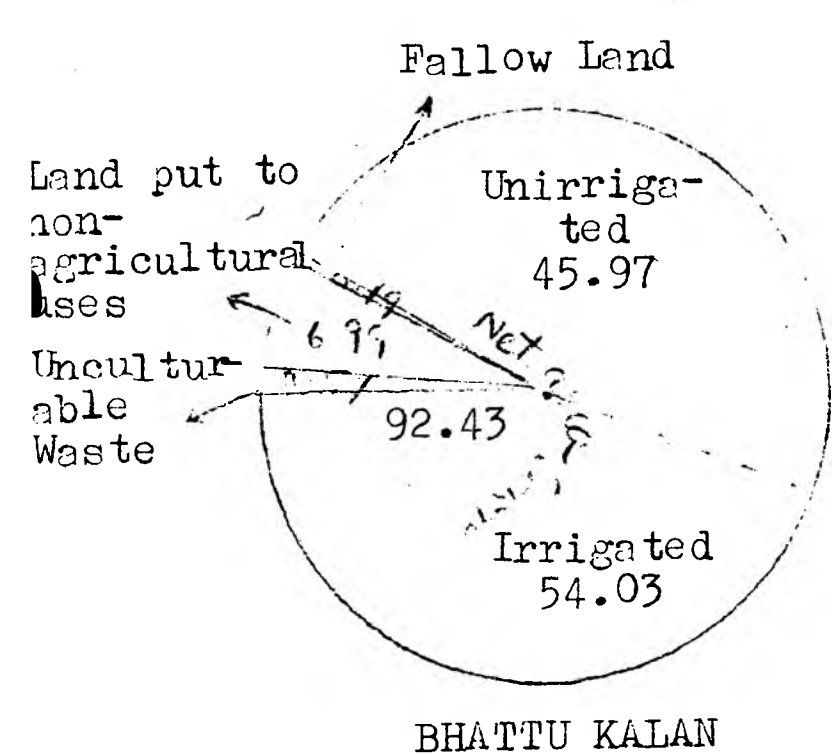
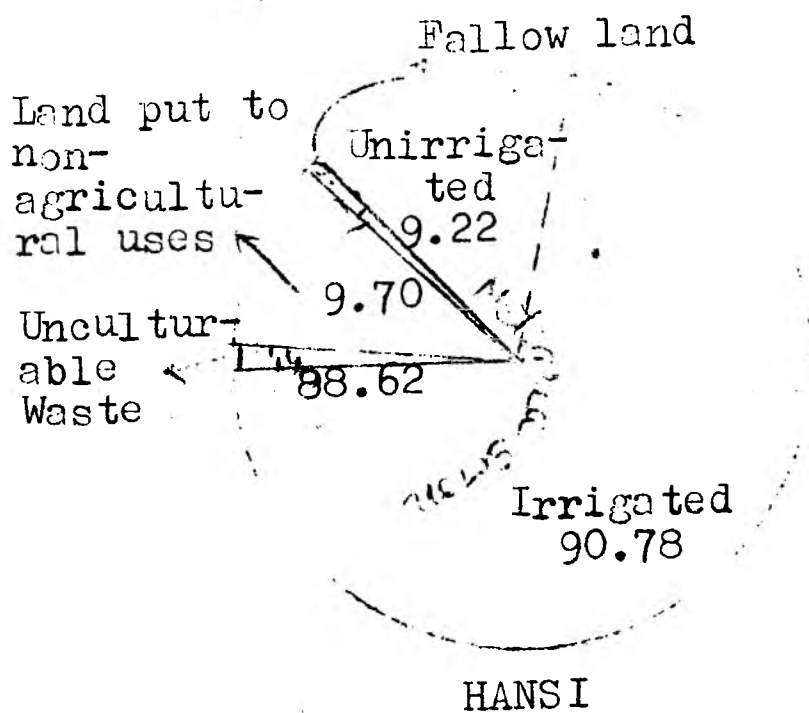
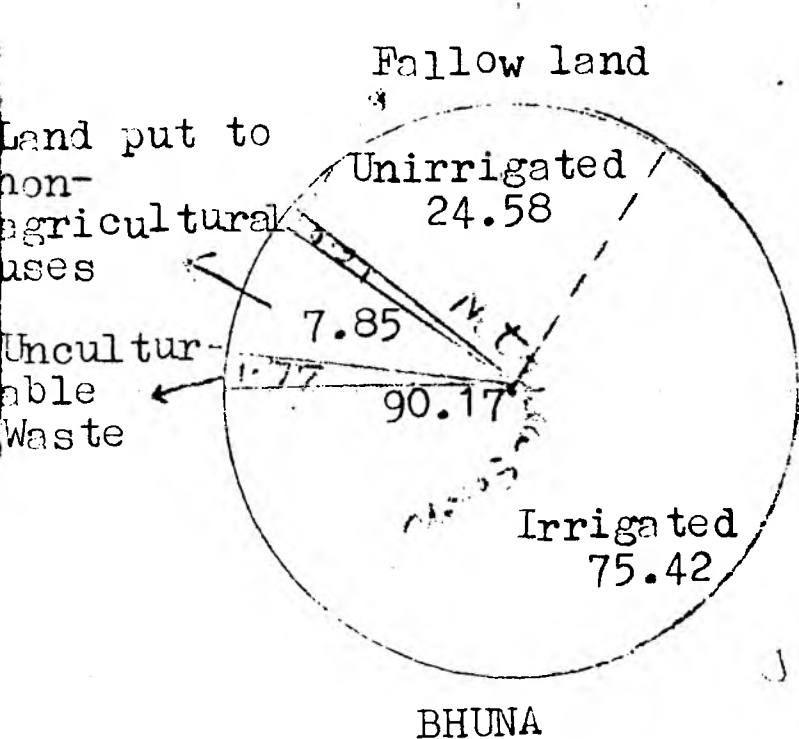
Figures in parenthesis show the percentage to total geographical area.

*Figures in parentheses show the percentage to net area sown.

Fig. VI.

LAND UTILIZATION PATTERN OF BHUNA, HANSI AND BHATTU KALAN CLUSTERS

(Percentage to total geographical area)



Cropping pattern

In Bhuna cluster, the maximum area was under bajra, followed by gram, cotton, wheat and guar. In Hansi, wheat occupied the maximum area followed by gram, cotton, bajra and guar; whereas, in Bhattu Kalan the maximum area was under bajra followed by gram, cotton, guar and wheat. In table 1.6, the cropping pattern of the three clusters has been shown in detail. (See also Fig. VII). Other crops which were grown on very limited area were sorghum, sugarcane, berseem, vegetables, oilseed and barley. Cultivation of vegetables was confined mainly around Hansi and Bhuna. In Bhattu Kalan, area under vegetables was almost negligible. A few orchards covering about 287 and 260 hectares of land were located around Hansi and Bhuna clusters; but, in Bhattu Kalan, fruit trees were rarely seen. Orchards mainly contained citrus, ber and guava. Among vegetables, tomatoes, cauliflower, cabbage, onion, chillies, ladies finger, brinjal and cucurbits were grown in limited areas.

Area under high-yielding varieties

About the adoption of high-yielding variety seeds of different crops in the three clusters, information was collected and the results are contained in table 1.7. Growing of hybrid bajra was reported to be on about 13, 11 and 11 per cent of the total area under crop in Bhuna, Hansi and Bhattu Kalan clusters, respectively. In case of cotton about 60 per cent of the total area under the crop was under American cotton in Bhuna cluster; while, in Hansi and Bhattu Kalan, it was about 50 and 37 per cent, respectively. The remaining area under the crop was reported to be under desi cotton. Gram and sugarcane were the two crops grown in almost all the area under the crop with high-yielding varieties.

Table 1.6 : Cropping pattern in Bhuna, Hansi and
Bhattu Kalan clusters
(area in ha.)

Name of the crop	Clusters			Total
	Bhuna	Hansi	Bhattu Kalan	
<u>Kharif</u>				
Eajra (Desi and H.Y.V.)	9904 (21.82)	5183 (13.99)	17868 (30.04)	32955 (23.22)
Cotton	8832 (19.46)	6060 (16.35)	10304 (17.32)	25196 (17.55)
Guar	3019 (6.65)	1051 (2.84)	6596 (11.09)	10666 (7.50)
Jowar	2570 (5.66)	2348 (6.34)	734 (1.23)	5652 (3.98)
Sugarcane	1071 (2.36)	854 (2.30)	23 (0.04)	1948 (1.36)
Others	347 (0.76)	305 (0.82)	379 (0.64)	1031 (0.72)
Vegetables	29 (0.06)	684 (1.85)	24 (0.04)	735 (0.52)
Rice	94 (0.21)	238 (0.64)	18 (0.03)	350 (0.25)
Maize	152 (0.33)	76 (0.21)	1 (0.001)	229 (0.15)
Oilseeds	6 (0.01)	6 (0.02)	1 (0.001)	13 (0.008)

contd...

(Table 1.6 contd...)

Name of the crop	Clusters			Total
	Bhuna	Hausi	Bhattu Kalan	
<u>Rabi</u>				
Gram	9090 (20.02)	6863 (18.51)	16239 (27.30)	32192 (22.68)
Wheat	6070 (13.37)	9448 (25.49)	5627 (9.46)	21145 (14.90)
Mustard	2471 (5.44)	1024 (2.76)	1013 (1.70)	4508 (3.18)
Barley	232 (0.51)	617 (1.66)	225 (0.38)	1074 (0.76)
Vegetables	472 (1.05)	606 (1.64)	5 (0.008)	1083 (0.76)
Berseem	488 (1.08)	398 (1.07)	134 (0.23)	1020 (0.71)
Methi	142 (0.31)	484 (1.31)	239 (0.40)	865 (0.60)
Others	260 (0.57)	287 (0.77)	17 (0.04)	564 (0.39)
Orchards	101 (0.22)	284 (0.77)	7 (0.01)	392 (0.28)
Lucern	47 (0.11)	243 (0.66)	24 (0.04)	314 (0.21)
Grand Total (Kharif and Rabi crops)	45397 (100.00)	37059 (100.00)	59478 (100.00)	141934 (100.00)

Figures in parentheses show the percentage to total cropped area.

Fig. VII.

CROPPING PATTERN OF BHUNA, HANSI AND BHATTU KALAN CLUSTERS

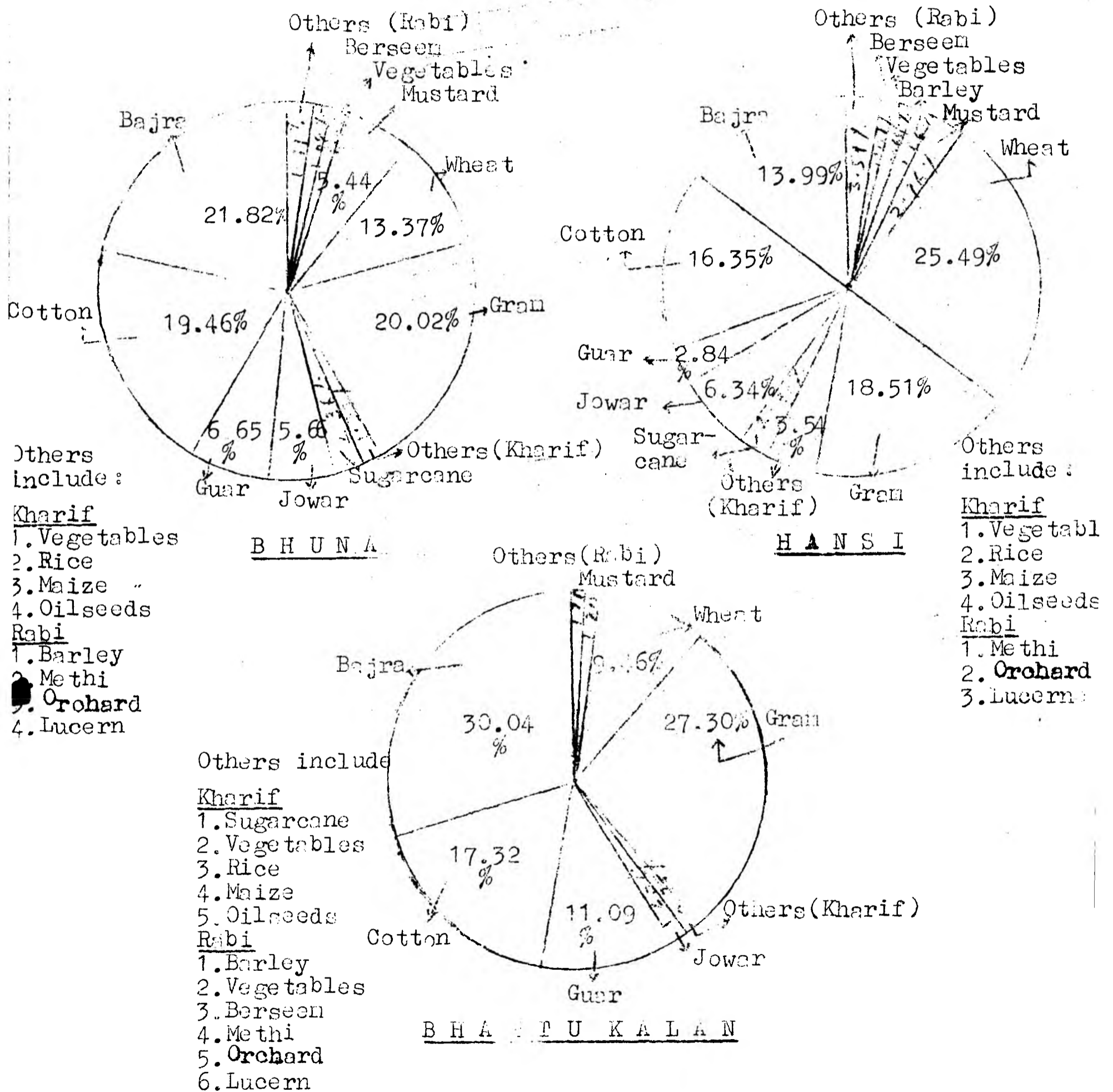


Table 1.7 : Area under high-yielding varieties in Bhuna, Hansi and Bhattu Kalan clusters.

Name of the crop	Clusters		
	Bhuna	Hansi	Bhattu Kalan
<u>Baira</u>			
a) H Y.V.	1301 (13.14)	555 (10.71)	2006 (11.23)
b) Desi	8603 (86.86)	4628 (89.29)	15862 (38.77)
Total	9904	5183	17868
<u>Cotton</u>			
a) H.Y.V. (American)	5335 (60.41)	3046 (50.26)	3776 (36.65)
b) Desi	3497 (39.59)	3014 (49.74)	6528 (63.35)
Total	8832	6060	10304
<u>Rice</u>			
a) H.Y.V.	29 (30.85)	227 (95.38)	-
b) Desi	65 (69.15)	11 (4.62)	18 (100.00)
Total	94	238	18

contd....

(Table 1.7 contd....)

Name of the crop	Clusters		
	Bhuna	Hansi	Bhattu Kalan
<u>Maize</u>			
a) H.Y.V	14 (9.21)	5 (6.58)	-
b) Desi	138 (90.79)	71 (93.42)	1 (100.00)
Total	152	76	1
<u>Wheat</u>			
a) H.Y.V.	4299 (70.82)	6478 (68.56)	4496 (79.90)
b) Desi	1771 (29.18)	2970 (31.44)	1131 (20.10)
Total	6070	9448	5627
<u>Gram (HYV)</u>	9090 (100.00)	6863 (100.00)	16239 (100.00)
<u>Sugarcane (HYV)</u>	1071 (100.00)	854 (100.00)	23 (100.00)

Figures in parentheses show the percentage to total area under the crop.

In case of wheat, the area under improved varieties was nearly 71 per cent in Bhuna, 69 in Hansi and 80 per cent in Bhattu Kalan cluster. High-yielding varieties of rice occupied about 95 per cent of the total area under the crop around Hansi and about 31 per cent around Bhuna. Around Bhattu Kalan, only 18 hectares were under rice, all sown with desi varieties. Similar was the case with maize, as only one hectare area was under desi maize. However, around Bhuna and Hansi, about 9 per cent and 7 per cent of the total area under the crop were sown with hybrid or composite maize varieties, respectively. Fig. VIII shows a comparative situation in the three clusters.

Adoption of improved agricultural implements and machines in a particular area is one of the indicators of the level of development of that area. Hence, information about various implements and machines in these three clusters was collected, which is contained in table 1.8. Improved implements and machines which were found in these areas included bullock and tractor-drawn harrows, leveller, tractor, mould-board plough, thresher and drum, cultivator, seed-cum-fertilizer drill and trolley. Information about bullock-carts (dunlop and ordinary), chaff-cutter (power-driven and hand-driven), cane-crusher, wooden plough, tube-well, rahat, oil-engines, cotton ginning machines was also gathered. For comparing the intensive use of various implements and machines, their number per thousand hectares of cultivated land was worked out. The number of harrows was 5.08, 7.32 and 2.70 in Bhuna, Hansi and Bhattu Kalan clusters, respectively.

Levellers were maximum, i.e., 7.37 per thousand hectares in Bhuna, followed by Hansi (3.84) and Bhattu Kalan (2.23). Use of tractors was more in Hansi, followed by Bhuna and Bhattu Kalan. Their number per thousand hectares of cultivated area was 6.54, 4.51 and 1.95, respectively. On the other hand, use of mould-board plough

FIG. VIII.

AREA UNDER HIGH-YIELDING VARIETIES IN DIFFERENT CLUSTERS

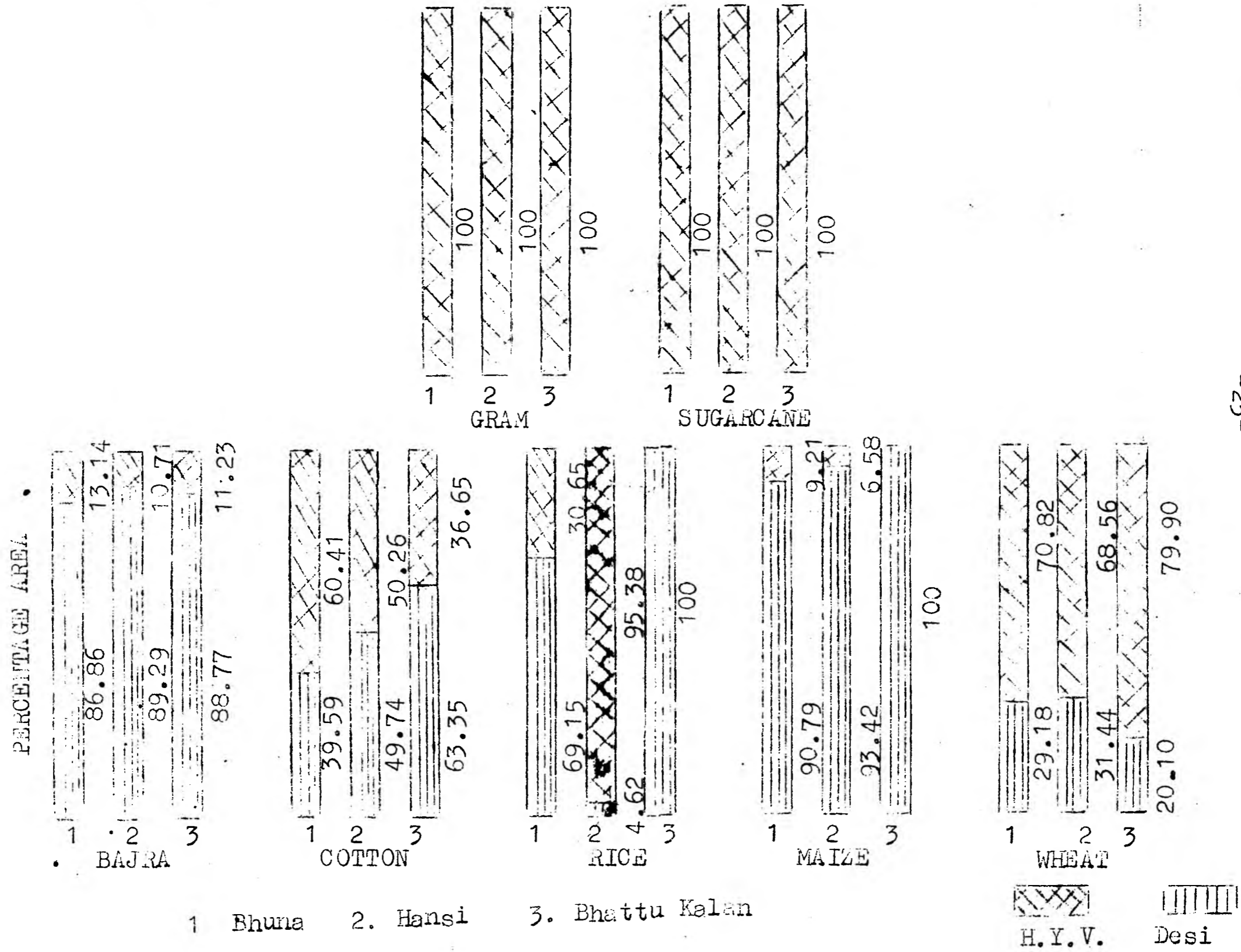


Table 1.8 : Implements and machinery in Bhuna, Hansi and Bhattu Kalan clusters

Implements and machinery	Clusters			Total
	Bhuna	Hansi	Bhattu Kalan	
(a) Improved				
Harrows	186 (5.08)	206 (7.32)	136 (2.70)	528 (4.59)
Leveller	270 (7.37)	108 (3.84)	112 (2.23)	490 (4.26)
Tractor	165 (4.51)	184 (6.54)	98 (1.95)	447 (3.89)
Mould-Board Plough	40 (1.09)	53 (1.88)	353 (7.02)	446 (3.88)
Thresher and Drum	68 (1.86)	202 (7.18)	59 (1.17)	429 (3.73)
Trolley	87 (2.38)	86 (3.06)	92 (1.83)	265 (2.30)
Cultivator	124 (3.39)	52 (1.85)	84 (1.67)	260 (2.26)
Seed-cum-Fertilizer drill	10 (0.27)	25 (0.89)	6 (0.12)	41 (0.36)
(b) Others				
Carts (rubber tyres)	81	79	617	777
Carts (ordinary)	6686	3080	1258	11024
Power-driven chaff cutter	105	222	135	462
Hand-driven chaff cutter	6007	3648	2372	12027
Cane crusher	125	156	51	332
Plough (wooden)	8547	1454	1867	11868
Tube-well	333	622	1	856
Cotton-ginning machine	19	6	11	36
Rahat	187	13	22	222
Oil Engines	23	53	27	102
Total cultivated area (ha)	36614	28124	50286	115024

Figures in parentheses give the number of implements/machinery per thousand hectares of cultivated area.

around Bhattu Kalan was maximum, having, on an average, 7.02 mould-board ploughs per thousand hectares of cultivated area, whereas, in case of Bhuna and Hansi, this figure was 1.09 and 1.88, respectively. This was because the soils around Bhattu Kalan are comparatively light. Use of thresher and drummy was observed maximum around Hansi as, on an average, there were 7.18 threshers/drummy per thousand hectares of cultivated land in this area, compared to 1.86 around Bhuna and 1.70 around Bhattu Kalan. Similarly, seed-cum-fertilizer drills were more around Hansi, followed by Bhuna and Bhattu Kalan clusters. Use of cultivators for tillage was maximum in Bhuna, followed by Hansi and Bhattu Kalan clusters. The number of tubewells, oil-engines, cane crushers etc. was also maximum around Hansi. Details of all these implements and machines in the three clusters are given in table 1.8 and Fig. IX.

On the whole, it was observed that the use of improved agricultural implements and machines was maximum around Hansi, followed by Bhuna and Bhattu Kalan. This was because of comparatively better irrigation facilities, plain topography and suitable soil-type available in the area.

Livestock and poultry

Animal husbandry is the second important sector of rural economy in this area. Particularly for the weaker sections of the rural community, this may be the mainstay of life, providing adequate employment and income to the families. Hence, the number and type of animals and poultry birds kept by the rural people have a direct bearing on the family employment and income. As such, number of different types of livestock and poultry birds kept in these villages was calculated and the same is reflected in table 1.9. Common animals reared in these areas were buffaloes, cattle, sheep, goats, camels, and poultry birds. It was observed that the number of cattle per thousand of human population in

FIG. IX.

IMPLEMENTS AND MACHINERY IN DIFFERENT CLUSTERS
 (Number per thousand hectares of cultivated area)

1. Harrow
2. Leveller
3. Tractor
4. Mould-Board Plough
5. Thresher and Drummy
6. Trolley.
7. Cultivator
8. Seed-cum-Fertilizer Drill

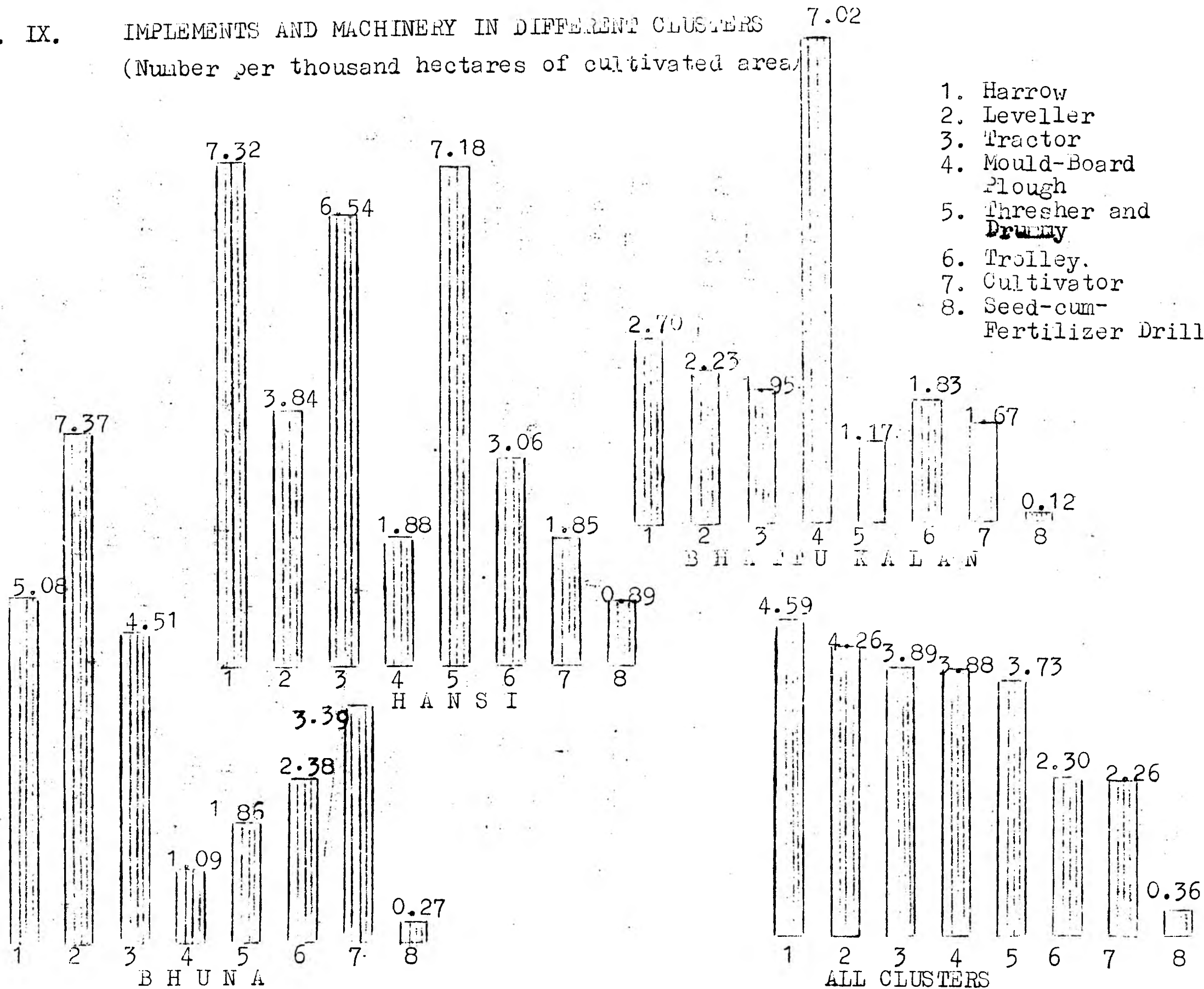


Table 1.9 : Livestock and poultry population of Bhuna, Hansi and Bhattu Kalan clusters.

Livestock and poultry	Clusters			Total
	Bhuna	Hansi	Bhattu Kalan	
Cattle	20078 (266)	17583 (240)	12799 (162)	50460 (222)
Buffaloes	21713 (288)	17212 (235)	10390 (138)	49815 (219)
Goats	3640 (48)	2090 (28)	6288 (80)	12018 (52)
Sheep	7720 (102)	4495 (61)	6802 (86)	18917 (83)
Camels	704 (9)	40 (0.54)	5067 (64)	5811 (25)
Donkeys	765 (10)	790 (10)	365 (4)	1920 (8)
Pigs	887 (11)	1086 (14)	160 (2)	2133 (9)
Poultry	2370 (31)	1443 (19)	1031 (13)	4844 (21)

Figures in parentheses show the number per thousand of human population.

in Bhuna, Hansi and Bhattu Kalan clusters was 266, 240 and 162, respectively. Similarly, in case of buffaloes, Bhuna ranked first having 238 buffaloes per thousand of population, followed by Hansi (235) and Bhattu Kalan (138). Number of goats per thousand of population was maximum (80) in Bhattu Kalan, followed by Bhuna (48) and Hansi (28). In case of sheep, too, Bhuna cluster topped, having 102 sheep per thousand of population as compared to 86 in Bhattu Kalan and 61 in Hansi.

Number of poultry birds per thousand of population was 31 in Bhuna as against 19 in Hansi and 13 in Bhattu Kalan. Population of camel was considerably much more in Bhattu Kalan, followed by Bhuna having light soils and using the camel as the main source of farm power. In Hansi, they were found very few. Number of pigs and donkeys in the three clusters was very less showing an average figure of 9 and 8, respectively per thousand of population. Details of each are given in Fig. X.

Feeds and fodder fed to livestock

Productivity of domestic animals and birds undoubtedly depends on their genetic character, but the quality as well as quantity of feeds and fodders fed to them has a direct bearing on their production. To have a look into the feeding practices of livestock in these areas, information was gathered, a detailed account of which is given in tables 1.10 and 1.11.

As regards feeding of the concentrate to the domestic animals, it was observed that most of the grains which were produced at home or in the locality, were commonly fed. A good number of concentrates constituted the feed-mix. According to the order of preference, guar and gram ranked first, followed by cotton-seed, bajra, gur, barley, oil, methi and mustard. Use of wheat, maize and ghee was also reported, but was not very common. Almost, in all the three clusters, the feeding practices of concentrates were similar with a slight change, as can be seen in Fig. XI.

LIVESTOCK AND POULTRY POPULATION IN DIFFERENT CLUSTERS

(Number per thousand of human population)

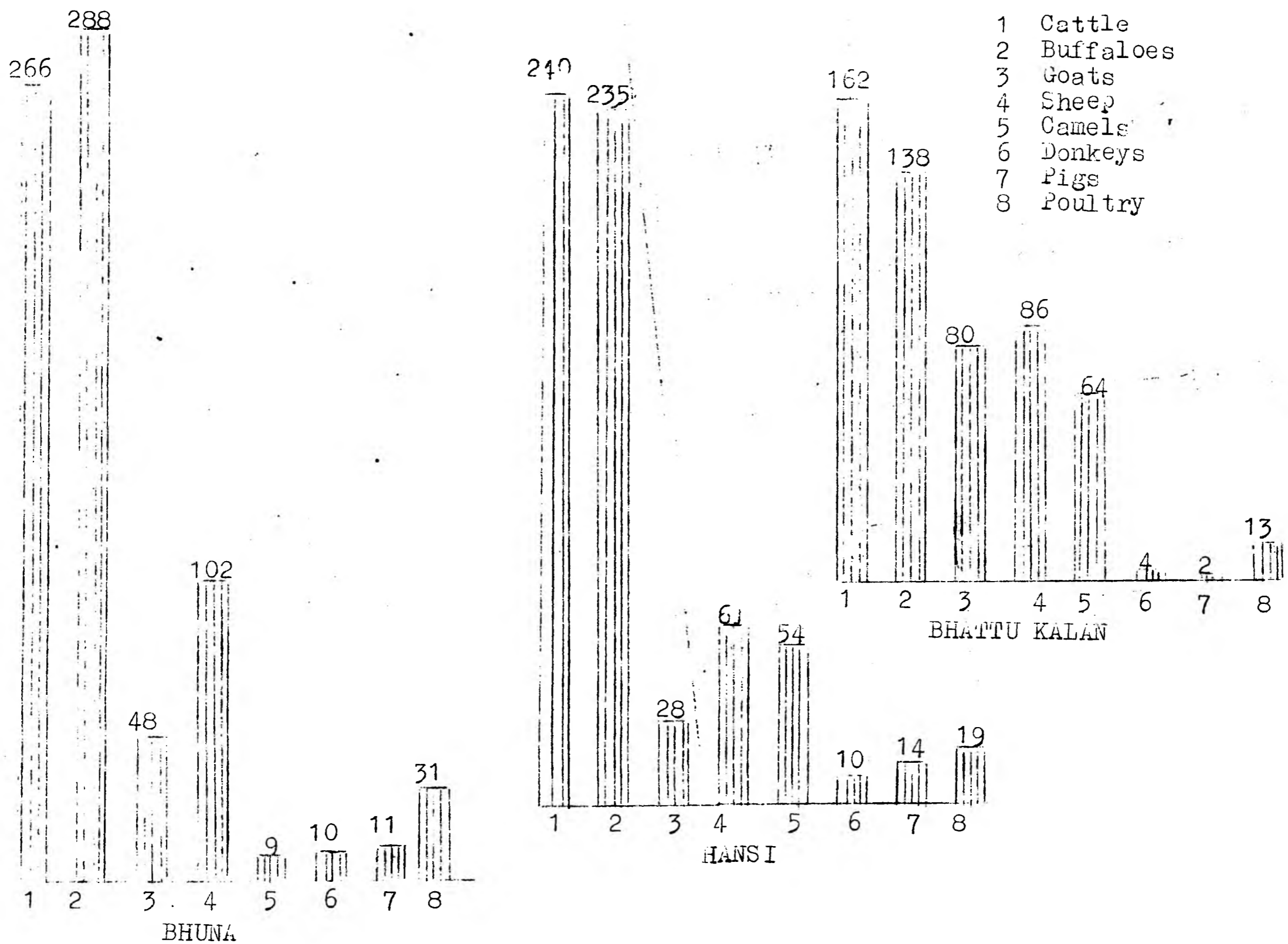


Table 1.10 : Concentrates fed to livestock of Bhuna,
Hansi and Bhattu Kalan clusters

(Number of village

Particulars	Clusters			Total
	Bhuna	Hansi	Bhattu Kalan	
<u>A. Concentrates</u>				
Guar	30	30	30	90
Barley	21	19	15	55
Gram	30	30	30	90
Cotton	28	30	28	86
Gur	16	22	27	65
Taramira	18	5	14	37
Maize	5	2	2	9
Mustard	17	10	17	44
Bajra	21	28	30	79
Wheat	7	4	4	15
Methi	19	14	12	45
Ghee	4	3	1	8
Oil	18	8	25	51
<u>B. By-products</u>				
Mustard cake	27	29	27	83
Cotton Seed cake	21	25	25	71
Rice Polish	1	14	-	15
Wheat bran	24	26	21	71
Gran chokar	19	4	12	31
Groundnut cake	6	25	3	34

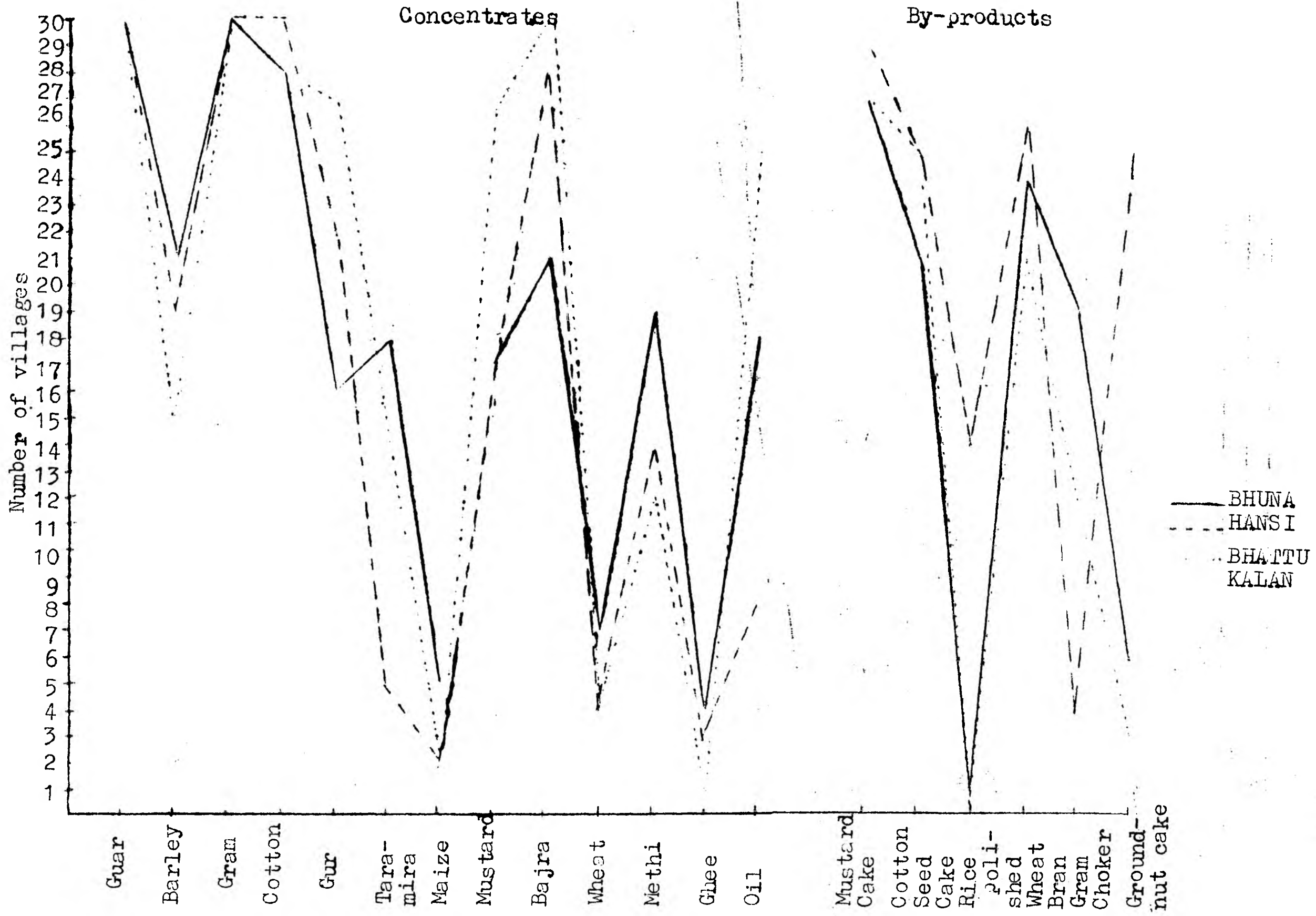
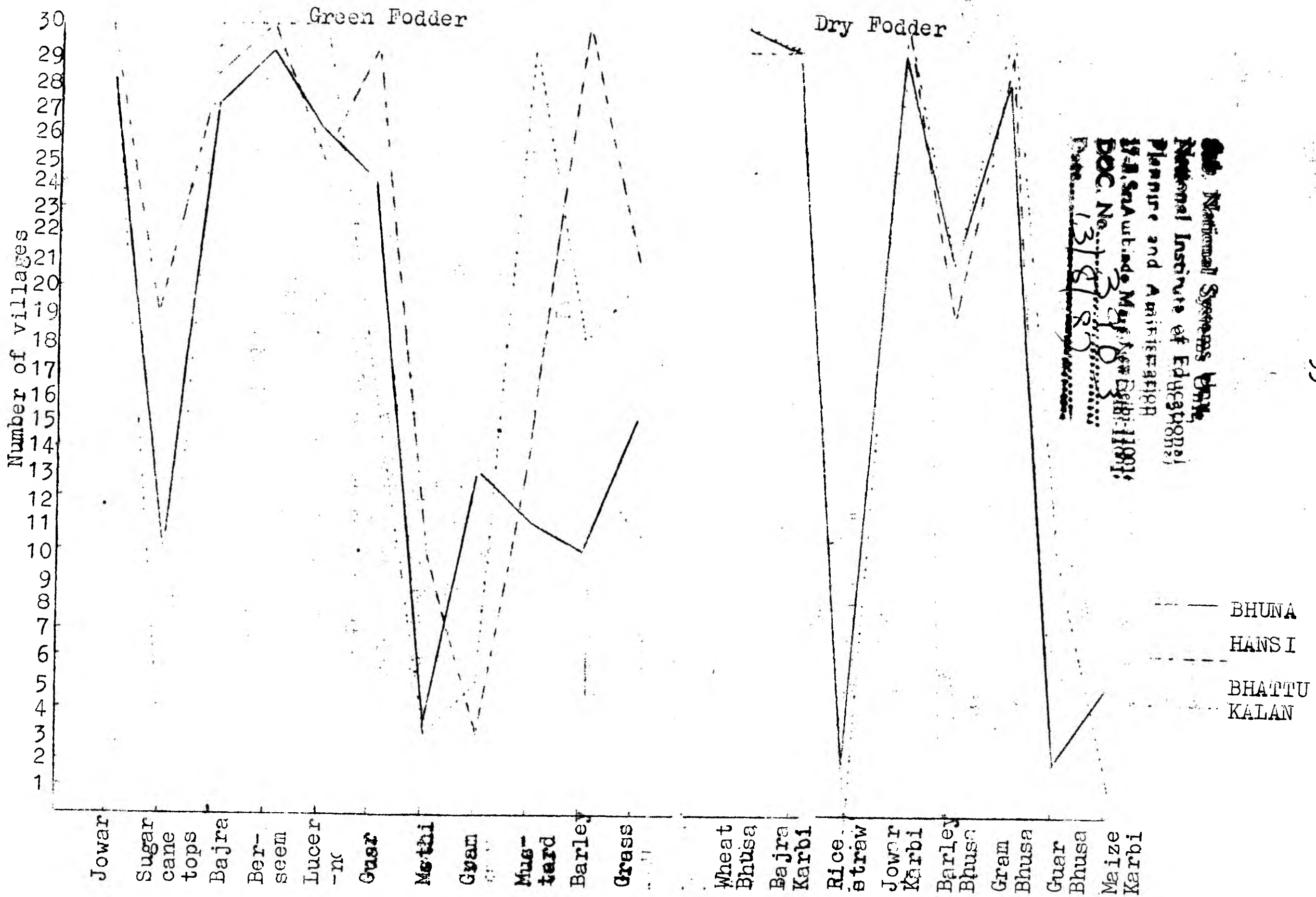


Table 1.11 : Fodders fed to livestock of Bhuna, Hansi and Bhattu Kalan clusters

Particulars	Clusters			Total
	Bhuna	Hansi	Bhattu Kalan	
<u>Green fodders</u>				
Jowar	28	30	28	86
Sugarcane tops	10	19	2	31
Bajra	27	28	30	85
Berseem	29	30	30	89
Lucern	26	25	30	81
Guar	24	29	17	70
Methi	3	10	3	16
Gram	13	3	5	21
Mustard	11	14	29	54
Barley	10	30	18	58
Grass	15	21	20	56
<u>Dry fodders</u>				
Wheat bhusa	30	29	30	89
Bajra Karbi	29	29	29	87
Rice straw	2	2	-	4
Jowar karbi	29	30	30	89
Barley bhusa	21	19	21	61
Gram bhusa	28	29	30	87
Guar bhusa	2	2	10	14
Maize karbi	5	5	1	11



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Among the by-products, mustard-cake, cotton-cake and wheat bran were more common. Some people also used to feed their animals with groundnut cake, gram-chokar and **rice polish**. However, use of **rice polish** was mainly confined to Hansi area.

Green and dry fodders mainly constitute the bulk of animals' feed and people of this area are very much careful about their domestic animals, particularly, cattle and buffaloes. A good-mix of green and dry fodders fed to these animals was reported and the same is shown in table 1.11.

Green fodders constituted mainly berseen, jowar, bajra, lucern, guar, barley, grasses and mustard. In some of the villages, green gram, sugarcane tops and methi were also fed to animals. Normally, the feeding practice of green fodders depended upon the production and availability of these crops in the area. Among the dry fodders which were fed to the domestic animals, wheat bhusa and jowar karbi were most common, followed by bajra karbi, gram bhusa and barley bhusa. In a few villages, use of guar bhusa, maize karbi and rice straws was also reported. Fig. XII compares these practices in the three clusters.

CONCLUSIONS AND SUGGESTIONS

Conclusions

The quality of human life not only depends on the personal qualifications, employment and income, but the public services and social amenities provided to an area also influence it to a great extent. Working efficiency and productivity of the people are also affected by the surroundings within which they work. As such, for studying these factors, conditions, existing resources and socio-economic status of the people around Bhuna, Hansi and Bhattu Kalan, a general survey of these areas was conducted. The main findings of the survey are summed up as follows.

The three clusters combined together covered about 1/5 of the total area as well as the same proportion of population of the district. However, the density of population was maximum around Hansi, i.e., 303 per square km., followed by Bhuna (246) and Bhattu Kalan (167). Thus, Bhuna and Hansi clusters are densely populated as compared to the district average of 178 persons per square km. Average size of family ranged from 7.50 around Bhuna to 8.16 around Hansi. The pressure of population on land was noticed maximum around Hansi followed by Bhuna and Bhattu Kalan as the per capita availability of arable land was 0.38, 0.49 and 0.69 hectares in the three clusters, respectively.

The number of cultivators was found to be maximum around Bhuna, followed by Bhattu Kalan and Hansi, thus, indicating the largest number of landless households around Hansi, followed by Bhattu Kalan and Bhuna. The weaker groups comprising small and marginal farmers and landless labourers constituted about 71 per cent of the total households in Hansi, 59 per cent in Bhattu Kalan and 44 per cent in Bhuna clusters. Employment pattern of the cultivators, landless labourers and rural artisans indicated that about 48 per cent of the cultivators, 7 per cent of the landless labourers and 41 per cent of the artisans were fully employed and the rest were partially employed. The employment position of cultivators in the three clusters revealed that around Bhattu Kalan, nearly 61 per cent of the cultivators were fully employed as against 45 per cent around Bhuna and 39 per cent around Hansi. The landless households which were reported to be fully employed were about 6 per cent in Hansi and 8 per cent each in Bhuna and Bhattu Kalan clusters. Artisans mainly comprised carpenters, barbers, potters, cobblers, blacksmiths and water suppliers (Kahar). About 31 per cent of the total artisans were fully employed in Bhuna as compared to 35 per cent in Hansi and 49 per cent in Bhattu Kalan clusters.

Facilities for primary and middle education were normally adequate in the three clusters but for higher education and technical training, facilities were inadequate in Bhuna and Bhattu Kalan clusters. In a few cases, particularly around Bhuna and Bhattu Kalan, the maximum distance between a village and the nearest high school was found to be about 11-12 km. Village institutions like Panchayat and cooperative society were almost in all the villages, but there was a lack of youth organisations in all the three clusters.

Facilities regarding public health and medical aid were adequate but required re-orientation and streamlining for better services. Considering the importance of animal husbandry and livestock population, the veterinary aid and artificial insemination facilities were found inadequate in all the three clusters. In most of the cases, the livestock owners used to travel 12-15 km. to avail these facilities. With regard to credit and banking facilities, the number of primary agricultural cooperative credit societies/mini-banks in all the three clusters were adequate, but their functioning needed to be reoriented and diverted towards weaker sections of the community. The number of commercial banks in Bhattu Kalan area was only one and the maximum distance between a village and the nearest bank branch varied from 12 km. in Hansi to 14 km. in Bhuna clusters.

As far as land use pattern in the three clusters is concerned, there were not much variations and about 89 per cent to 93 per cent of the total geographical area was under cultivation. However, due to variation in irrigation facilities and topography of the soil, the intensity of cropping varied from 122 per cent in Bhattu Kalan to about 141 per cent in Hansi clusters. The net irrigated area was about 46 per cent in Bhattu Kalan, 75 per cent in Bhuna and 91 per cent of the net area sown in Hansi clusters. In all the three clusters,

there was neither any land under forest nor permanent pasture and grazing land. Cropping pattern in these three clusters was slightly different according to availability of irrigation and type of soil. However, bajra, cotton, gram and wheat were the major crops in these areas covering about 75 to 85 per cent of the gross cropped area. In Bhuna and Bhattu Kalan, bajra occupied the maximum area, followed by gram, cotton and wheat, whereas around Hansi, the largest area was under wheat followed by gram, cotton and bajra. A number of other crops like guar, sugarcane, oilseeds, barley, berseem, lucern and methi were also grown, but only on limited area. Cultivation of vegetables was done mainly around Hansi and Bhuna. Fruit orchards containing citrus, guava and ber were found around Hansi and Bhuna only.

With reference to adoption of new agricultural technology in these areas, high-yielding varieties of bajra, cotton, wheat and gram were sown in all the three clusters. However, proportionately, the area under improved varieties of these crops was more in Hansi and Bhuna as compared to Bhattu Kalan cluster. Similarly, the use of improved implements and machines was more in Hansi, followed by Bhuna and the least in Bhattu Kalan area. Improved implements and machines, such as, harrow, leveller, tractor, cultivator, thresher/drummy, mould-board plough, etc. were more common.

Common animals kept by the people in these clusters were cattle, buffaloes, sheep and goats. Other animals like camels, donkeys, pigs and poultry birds, were also found but with a few households only. However, bovine population was the maximum, i.e., 554 per thousand of human population around Bhuna as compared to 475 around Hansi and 300 around Bhattu Kalan. On the other hand, the number of sheep, goats and camels was comparatively larger around Bhattu Kalan, followed by Bhuna and Hansi.

This was because of agro-climatic conditions suiting to different species of animals. Population of poultry birds, pigs and donkeys in all the three clusters was very low.

As far as feeds and fodders fed to livestock are concerned, quite a good varieties of them were fed in all the three clusters. Concentrates normally included grains of guar, gram, cotton, bajra, barley, methi, mustard etc. Amongst the by-products, mustard-cake, cotton-seed cake, wheat bran etc. were more common. Green fodders normally included jowar, berseen, bajra, lucern, guar, barley, grass, mustard etc., whereas common dry fodders were wheat straw, jowar karbi, bajra karbi, gram bhusa and barley bhusa.

Suggestions

After a careful study of the general and socio-economic conditions prevailing in the three clusters of villages, some of the important problems related with the weaker groups have been identified. Considering the magnitude of different problems and economic handicaps of the rural poor, some important suggestions may be given for the betterment of their lot. It is expected that with the proper implementation of these suggestions, the plight of the weaker groups in rural areas may be minimised.

1. As the pressure of population on land around Hansi was the maximum, extension of new agricultural technology to the small and marginal farmers, constituting majority of the cultivated households, is essential. The technology must suit the small farms so as to give maximum employment and income to the families. There is a good scope for intensification of agriculture including vegetable cultivation around Hansi and Bhuna.

2. For the small and marginal farmers in Bhattu Kalan area subsidiary avenues of income and employment, particularly, animal husbandry and dairying may be introduced. Due to limited irrigation and unfavourable topography, intensification of agriculture in this area is restricted. However, adoption of dry land agricultural technology for stabilization of income may be encouraged.
3. In Hansi area and in Bhuna too, dairy farming may be the second main source of income after agriculture for increasing the employment and income of the rural poor. However, an integrated and effective programme of genetic improvement in the existing livestock through cross-breeding, improved feeding, health cover and proper management should be undertaken most probably by a single agency having sufficient expertise in the field. Provisions for training, supply of good animals, balanced feed, fodder seed, credit and marketing of the products should also be made.
4. In Bhattu Kalan as well as in Bhuna, sheep and wool development may be a good proposition for the landless labourers and marginal farmers of the area. However arrangement for the supply of good sheep, training in management and development of pasture for grazing purposes is essential. Services for the grading, processing and marketing of wool and mutton should also be strengthened.

5. Landless people were the most unemployed or under-employed persons in these areas. For them, vocational training in weaving, quality shoe-making, carpentry, general mechanics and repairing etc. may be useful. However, necessary facilities for credit, tools and equipment, supply of raw-material, designs, and marketing should be readily provided. The whole system pertaining to different trades should also be organised on cooperative basis so as to become self-reliant and to gain the benefits of unity.
6. Simultaneously, while imparting the technical training to different categories of people, a literacy campaign will also help in developing the consciousness, skill and self-confidence among the poor technicians.
7. Rural artisans and educated youth should be given up-to-date training and assistance in the form of tools, equipment, credit, raw material and marketing of end-products. The strength and energy of the rural youth may be utilized for the rural reconstruction and socio-economic transformation after proper organisation and guidance.
8. Rural women, particularly poor ones, are the most under-privileged section of the community in respect of education, employment and social status. For them, vocational trainings in different trades, such as, tailoring, weaving, knitting, embroidery, canning, food-processing etc., which may give part-time and home-based employment to them, may be given. However, a strong external support for the supply of raw-material, designs, necessary tools and equipment and marketing is essential. Their lot requires an urgent organisation, informal education and socio-cultural support for the development of their mental horizon and self-confidence.

9. Poor children are the greatest sufferers of socio-economic adversities in the rural areas. At the time of career building, they are forced to become a bread-earner for the family. Their condition calls for a revolutionary change in the educational system so that while learning, they may be given trainings in different crafts and they do not become a burden on the family. This type of training in the schools will not only build up a sound career for them but will also develop greater skill, specialization and confidence from the very beginning.

SOCIO-ECONOMIC STATUS OF RURAL WOMEN AROUND BHUNA

"Every woman is a creator in the ideal of nationhood."

- Sarojni Naidu

Woman in this part of the country can be called a 'Treasurer' of her husband. She is her husband's help-mate and does every kind of field labour except driving the plough or the cart. She cooks food, manages the household affairs, carries food for the men-folk working in the field and actively helps in field operations. Looking after the domestic animals is her job and milking is also done by her. She makes embankment of the field, follows the plough dropping seed during the sowing season, makes the water channels, does weeding and harvesting and carries heavy loads of fodder crops on her head to the home. In addition, she has to collect the cow-dung and make it into opla. She has also to help her husband in nicely putting the foodgrains stored and looking after these to avoid any damage or pilferage.

The women in the villages wear the best clothes during the day when they go to the well to fetch water, for the well is also a village club where gossiping is exchanged. A village woman carries two to three pitchers on her head filled with water from the village well to the home, which is a remarkable feat of balancing and gives a graceful gait and poise. She cooks meals for the family, cleans the house and utensils, washes the clothes and does such other household jobs. Above all, she takes care of the kids and the husband in all respects.

The married women observe purdah and only the maidens go about with uncovered faces. Quite a few of them are good-looking in their teens, but the drudgery of life tells upon

them in a few years. The common dress that they wear is the graceful Ghagri and with bright clothes, it lends the charm and colour of the drab countryside. However, after the partition of Punjab and with the migration of the displaced persons from West Pakistan to these areas, a slight change in fashion has occurred. The salwar and kameez are being increasingly adopted by the young girls and even by some grown-up women. No doubt, the salwar is very useful and economical garment, but it is drab and less romantic in comparison to Ghagri.

While the women folk of this part of the country are so hard-working and share the burden of the family to a greater extent, the men-folk are seen smoking 'huqqa in front of their homes or playing cards and gossiping in the village chaupals. General reluctance on the part of men-folk to encourage female education is partly explained by the fact that they apprehend that the women will cease to do hard work if they become educated. As such, the percentage of education in the rural women is very low (8.90) and, generally, the girls after having attended the middle school, are not allowed to continue their studies.

Apart from being a help-mate in farming, a rural woman is also the keeper of her husband's conscience. Men are mostly hetrodox and seldom observe religious customs and leave prayers, fasts etc. to the women. Hinduism has stayed so well all through these thousands of years in the villages because of the adherence of women to the religious traditions.

In rural economy, women, as a group, form an important component of the rural work force, but have generally been by-passed in many developmental programmes adopted in the past. Therefore, greater emphasis needs to be given to impart practical trainings to this neglected section of the

society to upgrade their skills and equip them with modern technology to actively participate in this new programme. Keeping this factor in view and to have a deep in-sight into their existing problems, tastes, skills and aptitudes, the present survey on socio-economic status of rural women has been conducted with the following specific objectives:-

- (a) To identify the different economic activities of poor women in rural areas;
- (b) to measure the extent of employment and prevailing unemployment among them;
- (c) to examine the household facilities available and the role of women in making decisions in family affairs;
- (d) to find out the willingness of women for trainings in different trades; and
- (e) to suggest constructive and productive programmes for raising the mental horizons and earning capacity of the poor women.

Since the Integrated Rural Development Project is being established with specific objective to increase the purchasing power of the rural poor, particularly, small and marginal farmers, landless labourers, artisans, rural women and children below poverty line, by creating more employment opportunities, this study will help in knitting suitable programmes based on the needs and likings of the rural poor. Only in this way, by getting their active involvement and participation in their own programmes, a remarkable success can be achieved.

METHODOLOGY

Agroclimatically, Hissar district can be divided into three zones: the first zone comprising of Tohana, Bhuna and Ratia Blocks; the second zone constituting Fatehabad, Hissar-I, Hissar-II and Barwala Blocks; and the third zone consisting of Hansi-I, Hansi-II and Narnaud Blocks. The selected one is Bhuna Block which represents the first zone comprising mainly aeolian plain with sand dunes of stabilized and unstabilized nature. Soils of this Block are sandy to loamy sand in nature, well-drained and moderately eroded. These soils are low in nitrogen, low to medium in phosphorus and medium to high in potassium. Important crops grown in this region include wheat, gram, rabi oilseeds, cotton and bajra. Agriculture is the main occupation and source of income of the people in this area. Since Bhuna has been identified as a rural growth centre for establishing an Integrated Rural Development complex, it was felt necessary to conduct socio-economic survey around this area. According to the guidelines given by the Government of India, we drew up an inventory of resources of the district to select this typical village. No doubt, Bhuna is situated at a distance of 53 km. from the district headquarters at Hissar, but is well-connected with other parts of the district and towns, and is located in the rural environment. This village has also some basic developmental infrastructure for supporting the future programme of rural development. The village community represents a good mix of different social groups, viz., Jat, Bishnoi, Sikh, Brahman, Bania, Harijan and Punjabi immigrants.

Keeping the objectives in view, an in-depth study of a cluster of thirty villages around Bhuna was chosen for this investigation so as to determine the existing socio-economic status of rural women of this region. A

list of the small and marginal farmers and landless labourers already identified by the Small Farmers' Development Agency (SFDA) operating in the area, for each village was obtained so as to take an overall picture of the women's status in the villages. Ten per cent of the randomly selected groups of different categories were taken as respondents. Thus, the sample constituted 136 small farmers, 218 marginal farmers and 93 landless labourers, making a total of 447 households. In table 2.1, a detailed account of the total number of three categories (Small, marginal farmers and landless labourers.) of households and the number of selected households is mentioned.

TABLE 2.1

Number of total households under different categories and that of selected ones as respondents

Categories of households	Total number	Selected number
Small farmers ..	1340	136
Marginal farmers ..	2178	218
Landless labourers ..	913	93
Grand total ..	4431	447

DATA ANALYSIS AND DISCUSSION

Population and family composition:

A family is the basic unit around which all the socio-economic activities revolve. The nature and quantum of all the economic occupations depend mainly upon the size and composition of the family. Therefore, an attempt has been made here to study the structure and size of the families under survey.

A detailed account of the type and size of selected families under different categories is given in Table 2.2. Out of 447 selected families, 44.74 percent were operating as joint families and the remaining 55.26 per cent were managing household activities as nuclear type of families. When the ratio of joint and nuclear types of families was compared in each category, i.e., small and marginal farmers, and landless labourers, more or less the same pattern existed except that a little higher percentage went in favour of nuclear type of families in case of landless labourers, suggesting their aptitude towards nuclear type of families. The average size of a family for all the households under study was worked out to 7.6, ranging from 7.1 as minimum for landless labourers and 7.8 as maximum for small farmers. The number of female members was a little less than the male members in the family. Of the total number of family members, females accounted for 48.37 per cent, and 51.63 per cent went in favour of male members. Almost the same ratio was found in small and marginal farmers, and landless labourers. This is further supported by the fact that the number of female members per family was 3.7 as against 3.9 for male members, showing a sex ratio of 937 females for every 1000 of male population. These figures were considerably higher than the district figures of 862. Type and constitution of selected families are also shown in Fig. XIII.

TABLE 2.2.

Type and size of selected families under different categories

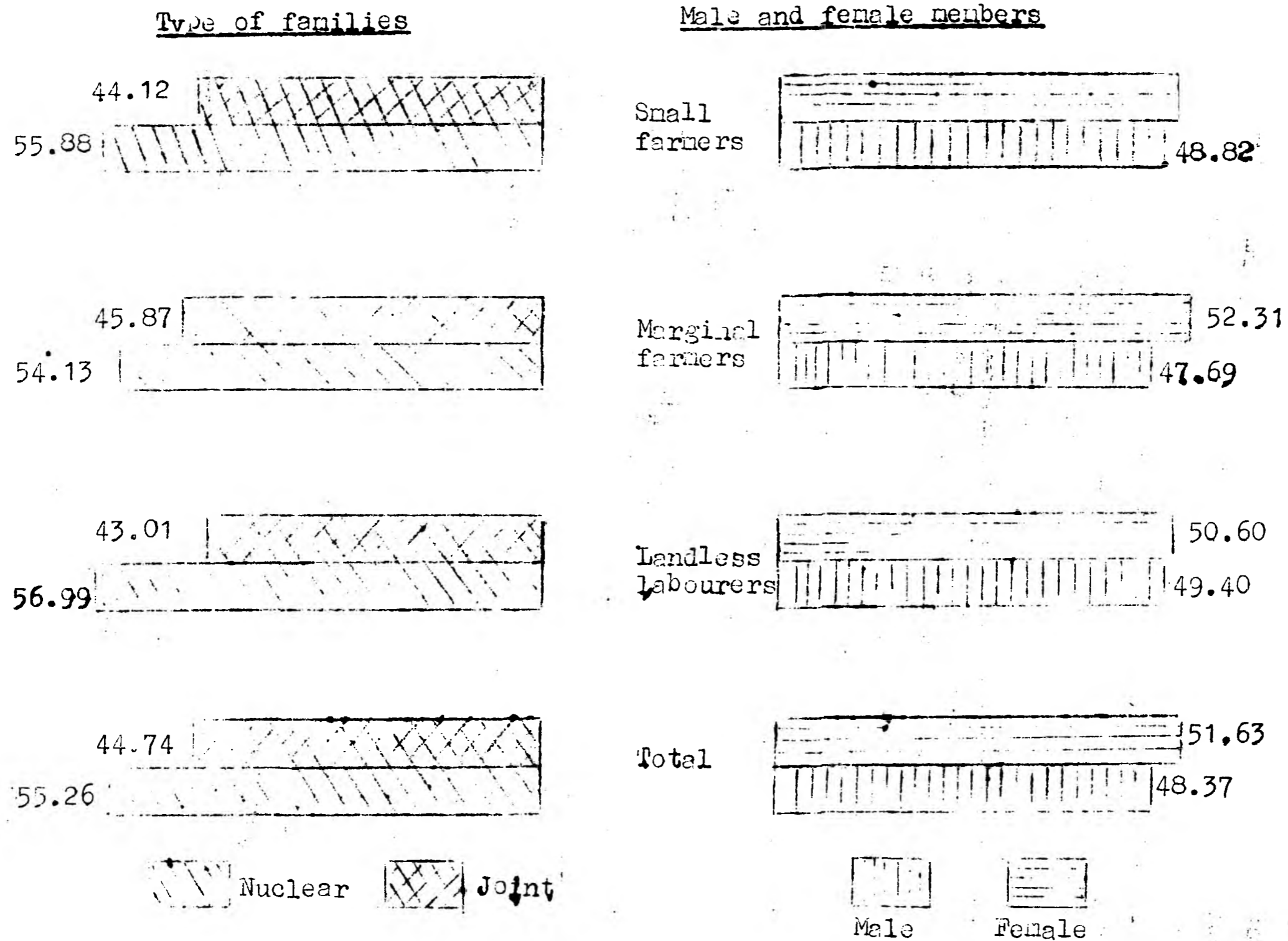
Sr. No.	Particulars	Small farmers	Marginal farmers	Landless labourers	All household
1.	Type of families:				
	(a) Joint	69 (44.12)	100 (45.87)	40 (43.01)	200 (44.74)
	(b) Nuclear	76 (55.88)	118 (54.13)	53 (56.99)	247 (55.26)
	Total families	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)
2.	Number of males	546 (51.18)	883 (52.31)	334 (50.60)	1763 (51.63)
3.	Number of females	521 (48.82)	805 (47.69)	326 (49.40)	1652 (48.37)
4.	Total number of family members	1067 (100.00)	1688 (100.00)	660 (100.00)	3415 (100.00)
5.	Average size of the family	7.8	7.7	7.1	7.6

Figures in parenthesis show the percentage of their respective total.

Number of children, working members and members of age in a family has a direct bearing upon the earning and expenditure of the household. Education of the children also depends upon the income of the family. Age-wise composition of a family also indicates the employment potential. With this idea in mind the composition of families according to the age of its members has been examined for various cate-

Fig. XIII.

TYPE OF SELECTED FAMILIES UNDER DIFFERENT CATEGORIES
(Percentage)



gories of households and the data in this regard is given in table 2.3. Of the total population, 10.83 per cent was found as infants upto 5 years, 33.94 per cent children of school-going age i.e. 5-15 years, 54.03 per cent in the age-group of 15-60 years as working force, and only 1.20 per cent reflected to be above 60 years of age. The maximum ratio of infants was noted as 12.20 per cent for marginal farmers and minimum as 9.09 per cent for landless labourers. When female and male infants were examined separately under different categories, the male infants showed more percentage in all the categories. The children population varied from 32.43 per cent as minimum in small farmers to 35.30 per cent as maximum in landless labourers. When this was examined separately for female and male population, an altogether reverse trend than the previous one was noted and female population was found to be dominating in all the categories.

The main population which formed the working age-group was observed as 56.33 per cent maximum in small farmers, followed by 54.49 per cent in landless labourers and 52.42 per cent, i.e., minimum, was shared by marginal farmers. A separate analysis of female and male population of this working group did not reveal anything more, except that male population in all the categories showed a little higher percentage than the female population. The population above 60 years of age was again maximum in small farmers and minimum in marginal farmers ranging from 1.50 to 1.02 per cent, respectively. Again, in this group, percentage of male population was found to be considerably higher than that of female in all the categories, suggesting that male population had more life than the female one. In Fig. XIV, family composition of different categories of households according to different age-groups has been shown.

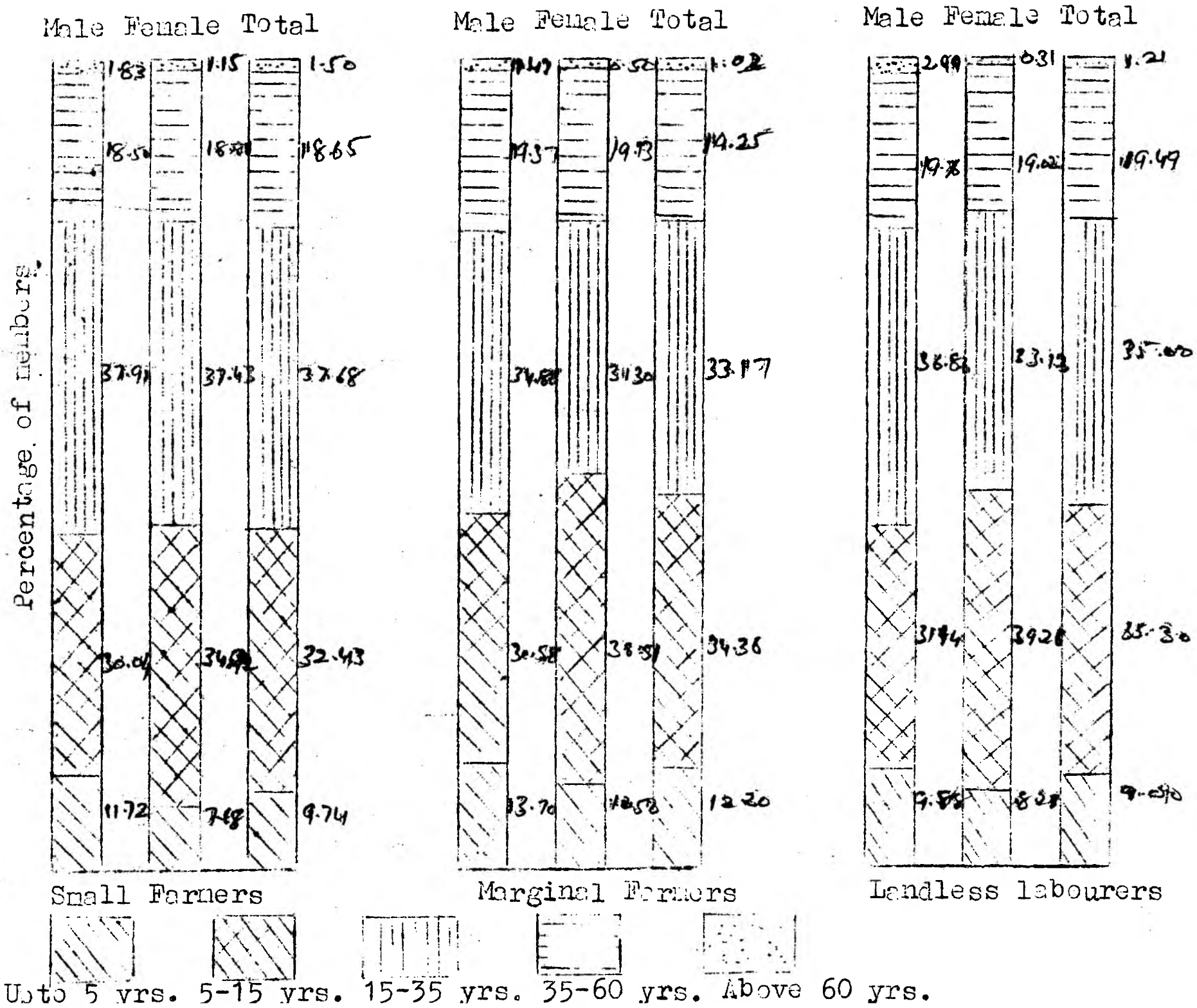
TABLE 2.3. Composition of family according to their age-groups in different categories.

Sr. No.	Age-group	Small farmers			Marginal farmers			Landless labourers			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	Upto 5 years	64 (11.72)	40 (7.68)	104 (9.74)	121 (13.70)	85 (10.56)	206 (12.20)	33 (9.88)	27 (8.23)	60 (9.09)	218 (12.37)	152 (9.20)	370 (10.83)
2.	5-15 years	164 (30.04)	182 (34.93)	346 (32.43)	270 (30.58)	310 (38.51)	580 (34.36)	105 (31.44)	128 (39.26)	233 (35.30)	539 (30.57)	620 (37.53)	1159 (33.94)
3.	15-35 years	207 (37.91)	195 (37.43)	402 (37.68)	308 (34.88)	252 (31.30)	560 (33.17)	123 (36.83)	103 (33.13)	231 (35.00)	638 (36.19)	555 (33.60)	1193 (34.94)
4.	35-60 years	101 (18.50)	98 (18.81)	199 (18.65)	171 (19.37)	154 (19.10)	325 (19.25)	66 (19.76)	62 (19.02)	128 (19.49)	338 (19.17)	314 (19.00)	652 (19.09)
5.	Above 60 years	10 (1.83)	6 (1.15)	16 (1.50)	13 (1.47)	4 (0.50)	17 (1.02)	7 (2.09)	1 (0.31)	8 (1.21)	30 (1.70)	11 (0.67)	41 (1.20)
6.	Total	346 (100)	520 (100)	1067 (100)	883 (100)	805 (100)	1688 (100)	334 (100)	326 (100)	660 (100)	1763 (100)	1652 (100)	3415 (100)

Figures in parentheses show the percentage of their respective total.

Fig. XIV.

FAMILY COMPOSITION ACCORDING TO AGE GROUPS
IN DIFFERENT CATEGORIES OF HOUSEHOLDS



The following conclusions may be drawn from the foregoing discussion :-

- (a) Nearly 11 per cent of the total population of rural poor are infants and about 34 per cent are children of school-going age.
- (b) Population in the working age-group (15-50 years) constitute about 54 per cent of the total population.
- (c) Persons of old age (above 60 years) are only about one per cent of the total population.
- (d) Number of infants and children of school-going age is more in marginal farmer families as compared to small farmers and landless labourers.
- (e) In all the categories of household, the age of males is longer than that of females.

Caste-wise break-up of families:

It would be worthwhile to look into the family structure in relation to different categories of households as well as social groups. As such, caste-wise break-up of families under different categories is presented in table 2.4. Of the total families surveyed, 26.85 per cent came from scheduled castes, 27.96 per cent from backward classes and 45.19 per cent from higher castes. On examining the different castes under different categories, it was found that scheduled caste households represented 14.7, 24.77 and 49.46 per cent; backward class households 26.47, 23.39 and 40.89 per cent and higher caste households reflected 58.82, 51.84 and 9.68 per cent of the small and marginal farmers, and landless labourers, respectively. Thus, it was noted that the scheduled caste households were invariably related with the size of holdings; whereas the percentage of higher caste households declined

Table 2.4. Break-up of Joint and Nuclear families of different categories

Different categories	Social groups	Joint	Nuclear	Total
Small farmers	Scheduled Caste	(70.00) 14 (23.33)	(30.00) 6 (7.89)	(100.00) 20 (14.71)
	Backward class	(47.22) 17 (28.33)	(52.78) 19 (25.00)	(100.00) 36 (26.47)
	Higher caste	(36.26) 29 (43.34)	(63.74) 51 (61.11)	(100.00) 80 (58.82)
	Total	60 (100.00)	76 (100.00)	136 (100.00)
Marginal farmers	Scheduled Caste	(38.89) 21 (21.00)	(61.11) 33 (27.97)	(100.00) 54 (24.77)
	Backward class	(54.91) 28 (28.00)	(45.09) 23 (19.49)	(100.00) 51 (23.39)
	Higher caste	(45.14) 51 (51.00)	(54.80) 62 (52.54)	(100.00) 113 (51.84)
	Total	100 (100.00)	118 (100.00)	218 (100.00)

(contd...)

(Table 2.4 contd...)

Different categories	Social groups	Joint	Nuclear	Total
Landless labourers	Scheduled caste	(36.96) 17 (42.50)	(63.04) 29 (54.72)	(100.00) 46 (49.46)
	Backward class	(50.00) 19 (47.50)	(50.00) 19 (35.85)	(100.00) 38 (40.86)
	Higher caste	(44.44) 4 (10.00)	(55.56) 5 (9.43)	(100.00) 9 (9.68)
	Total	40 (100.00)	53 (100.00)	93 (100.00)
TOTAL	Scheduled caste	(43.33) 52 (26.00)	(56.67) 68 (27.53)	(100.00) 120 (26.85)
	Backward class	(51.20) 64 (32.00)	(48.80) 61 (24.70)	(100.00) 125 (27.96)
	Higher caste	(41.59) 34 (42.00)	(58.41) 118 (47.77)	(100.00) 202 (45.19)
	Total	(44.74) 200 (100.00)	(55.26) 247 (100.00)	(100.00) 447 (100.00)

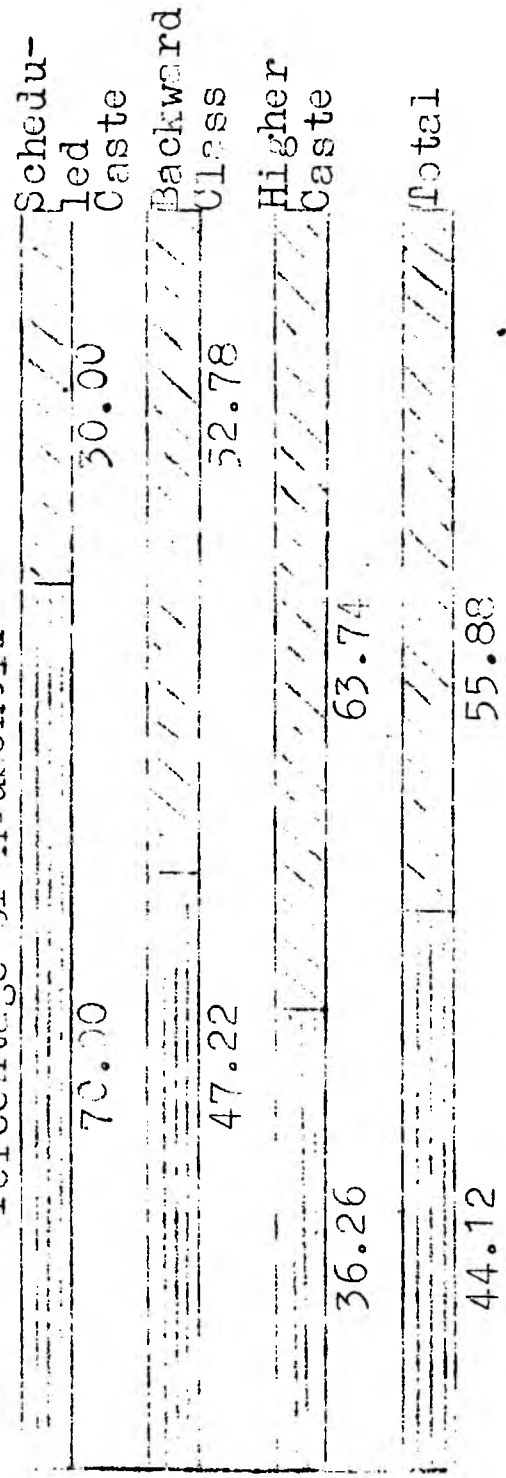
Figures in parenthesis show the percentage of their respective totals.

as the size of holdings decreased. One can safely conclude that the concentration of scheduled caste households was maximum in landless labours. A remarkable and significant increasing trend in case of scheduled caste nuclear type of families was noticed as the size of holdings decreased. It established that disintegration of joint families into nuclear families was greater in scheduled castes and landless labourers. (see Fig. XV and XVI).

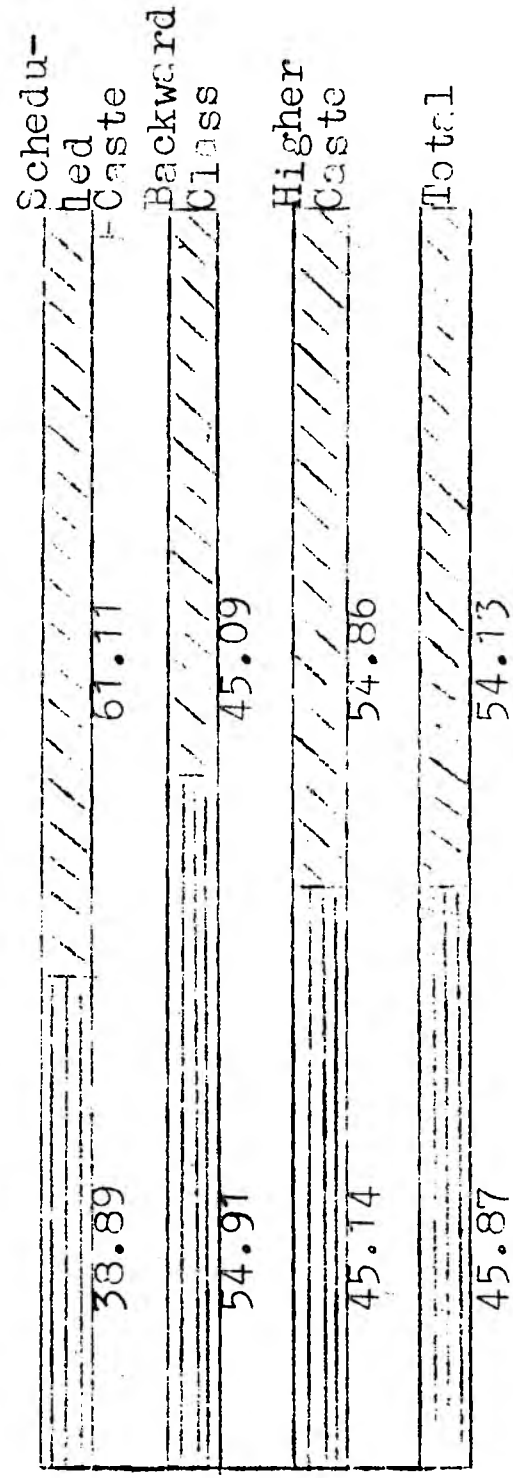
Broad conclusions emerging from table 2.4 are as under:-

- (a) Nearly 45 per cent of the total families are joint and the rest 55 per cent are nuclear ones.
- (b) Among the scheduled castes and the higher castes, nuclear families are comparatively more, but in backward class joint families are more than the nuclear ones.
- (c) Among scheduled castes disintegration of joint families into nuclear families increases as the family assets decrease, i.e., as soon as a scheduled caste family having small farms becomes marginal one, the division takes place.

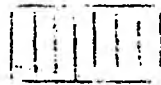
Percentage of households



Small Farmers



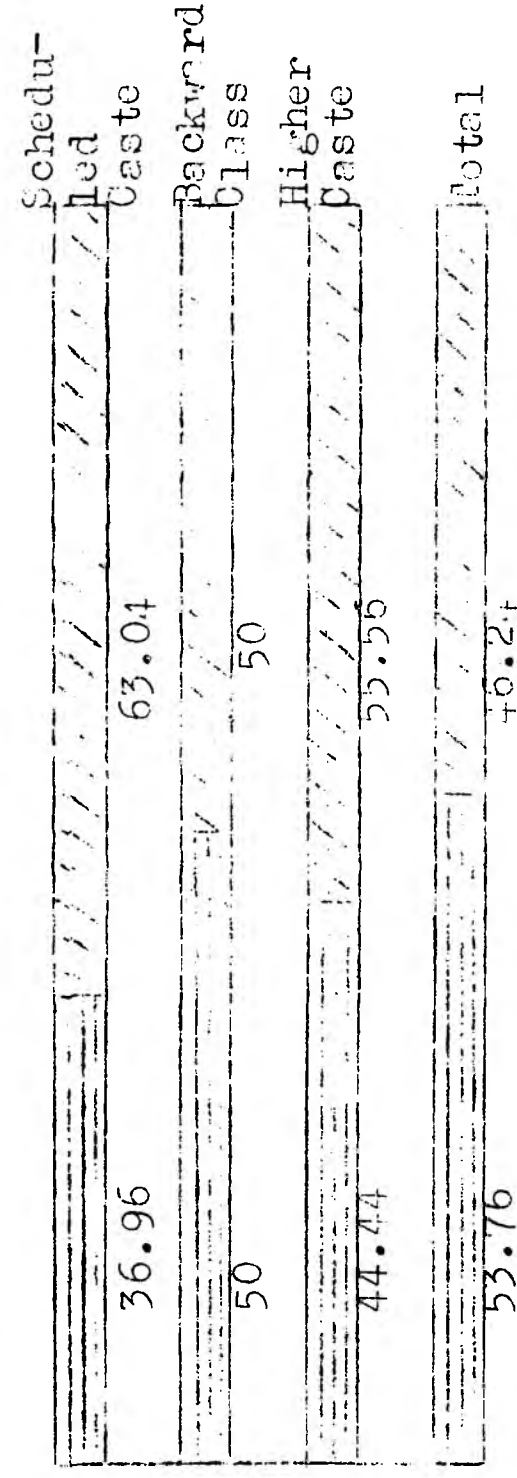
Marginal Farmers



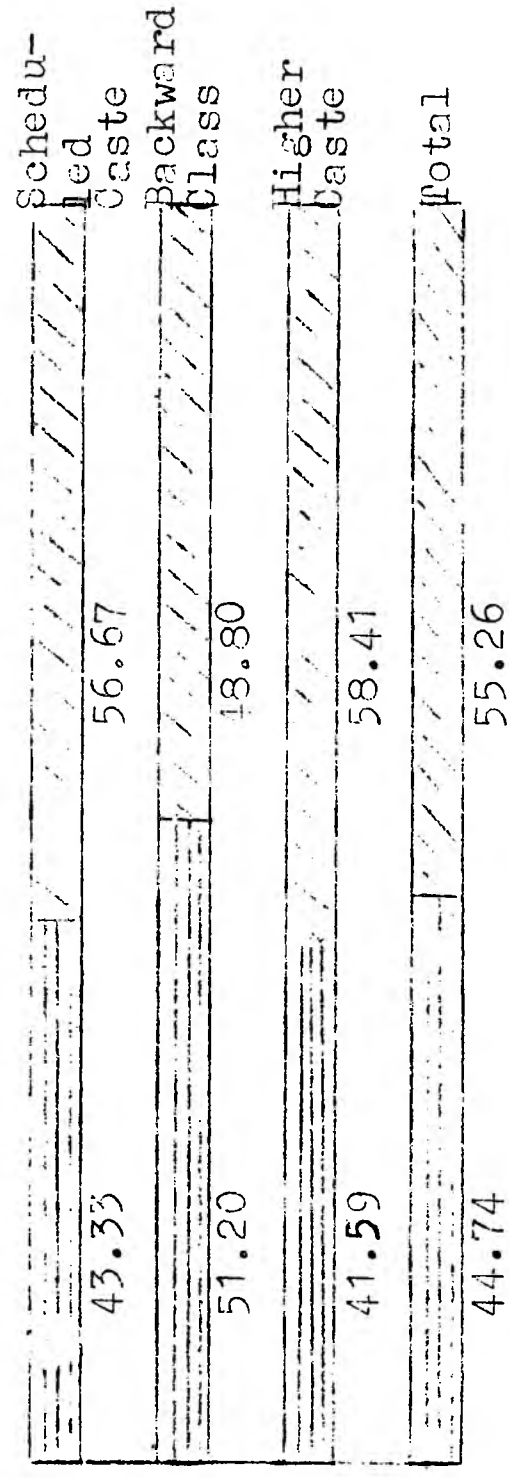
Joint



Nuclear



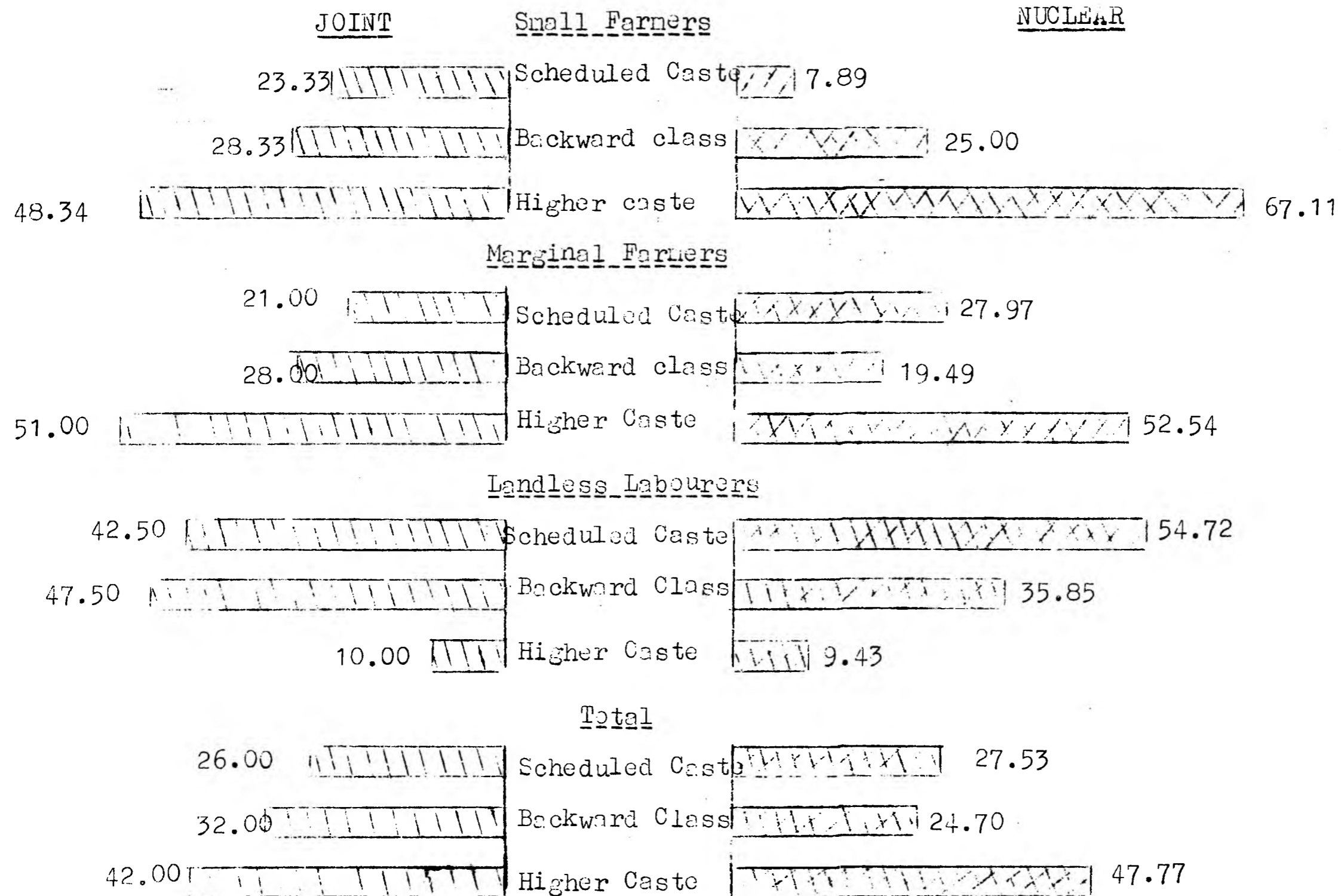
Landless Labourers



Total

Fig. XVI.

BREAK-UP OF JOINT AND NUCLEAR FAMILIES OF DIFFERENT CATEGORIES
(Percentage to total households)



Education:

The educational status of a family reflects the skill and efficiency of the members in relation to different types of work . Further, it also helps in suggesting suitable jobs for the families having different qualifications. Table 2.5 gives a detailed account of educational status of different categories of households. It would reveal that about 19.32 per cent of the total population of the selected households were found literate, which established a slightly higher percentage than the district literacy percentage reported for rural areas. Education among the male and female population separately was noted as 29.10 and 8.90 per cent, respectively. Among the small and marginal farmers, and landless labourers, the education level was 21.18, 20.56 and 13.16 per cent, respectively. In these three categories of households, the male literacy was 32.60, 29.73 and 21.84 per cent; whereas the female literacy was 9.22, 11.68 and 4.30 per cent, respectively. This provided a big gap between the male and female literacy. As the size of holding declined, the standard of education also went on decreasing. In case of women, it was more true, as, among the landless labourer households, there was no female who got education above the middle standard while among marginal farmer households, there was only one woman who was matriculate and in small farmer households, there were

Table 2.5. Educational pattern of various categories of households.

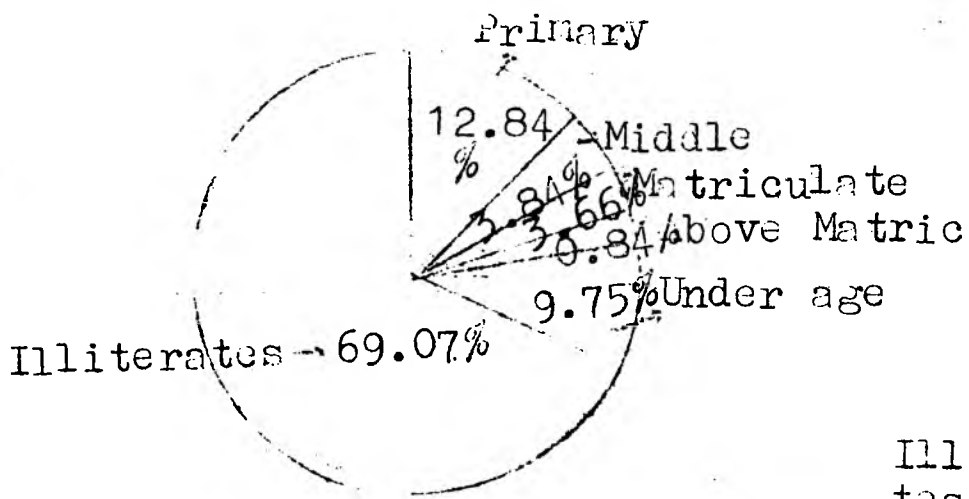
Particulars	Small Farmers			Marginal Farmers			Landless labourers			Total		Grand Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	
Under-age	64 (11.72)	40 (7.68)	104 (9.75)	121 (13.70)	85 (10.55)	206 (12.20)	33 (9.38)	27 (8.28)	60 (9.09)	218 (12.37)	152 (9.20)	370 (10.84)
Illiterate	304 (55.68)	433 (83.11)	733 (69.07)	500 (56.62)	635 (78.88)	1135 (67.24)	228 (68.26)	285 (37.41)	513 (77.73)	1032 (58.54)	1353 (81.90)	2385 (69.84)
Primary	95 (17.40)	42 (8.06)	137 (12.84)	107 (12.12)	68 (8.45)	175 (10.37)	38 (11.38)	12 (3.68)	50 (7.58)	240 (13.61)	122 (7.38)	362 (10.60)
Middle	39 (7.15)	2 (0.39)	41 (3.84)	70 (7.98)	16 (1.99)	86 (5.09)	17 (5.09)	2 (0.62)	19 (2.88)	126 (7.15)	20 (1.21)	146 (4.27)
Matriculate	38 (6.95)	1 (0.19)	39 (3.66)	56 (6.35)	1 (1.24)	57 (3.38)	12 (3.59)	-	12 (1.82)	106 (6.02)	2 (0.12)	108 (3.16)
Above matriculate	6 (1.10)	3 (0.58)	9 (0.84)	29 (3.28)	-	29 (1.72)	6 (1.78)	-	6 (0.90)	41 (2.33)	3 (0.18)	44 (1.29)
Total	546 (100)	521 (100)	1067 (100)	883 (100)	805 (100)	1688 (100)	334 (100)	326 (100)	660 (100)	1763 (100)	1652 (100)	3415 (100)

Figures in parenthesis show the percentage of their respective totals.

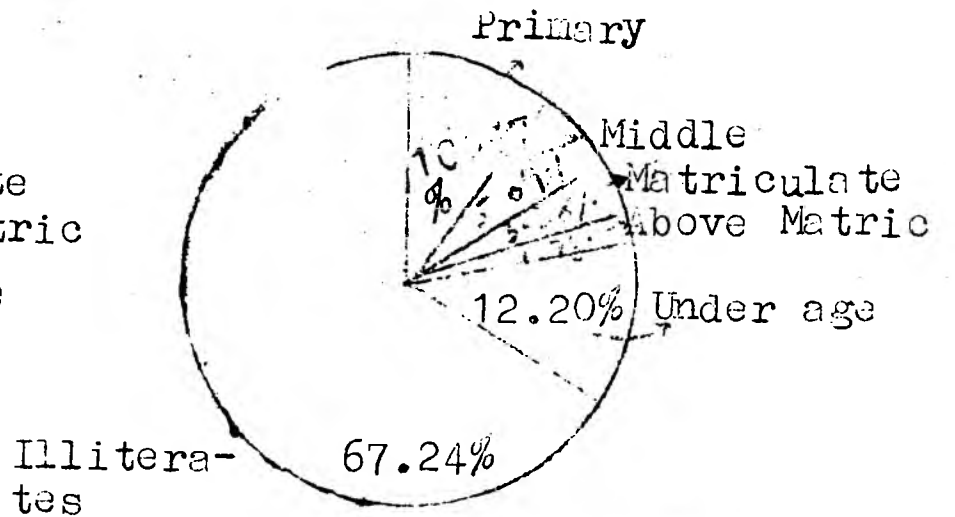
Fig. XVII.

EDUCATIONAL PATTERN AMONG DIFFERENT CATEGORIES OF HOUSEHOLDS

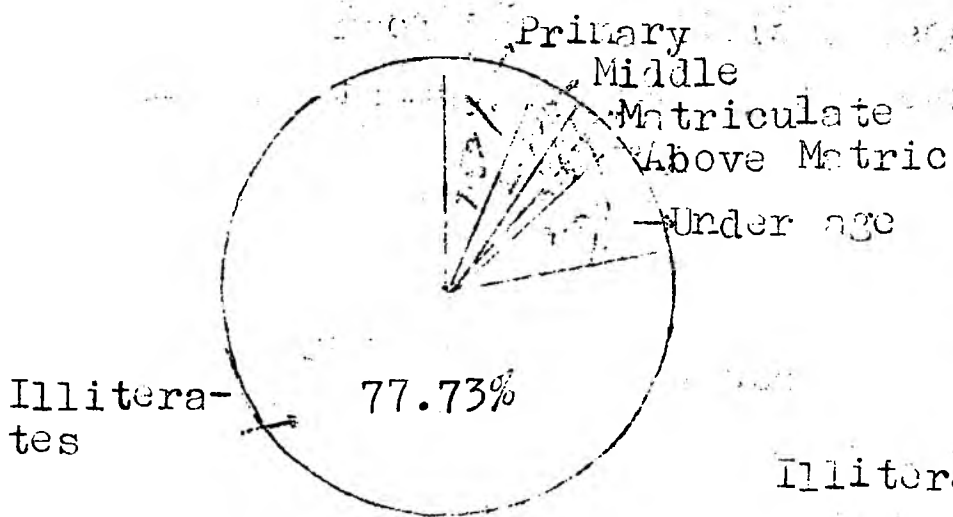
(Percentage to total population)



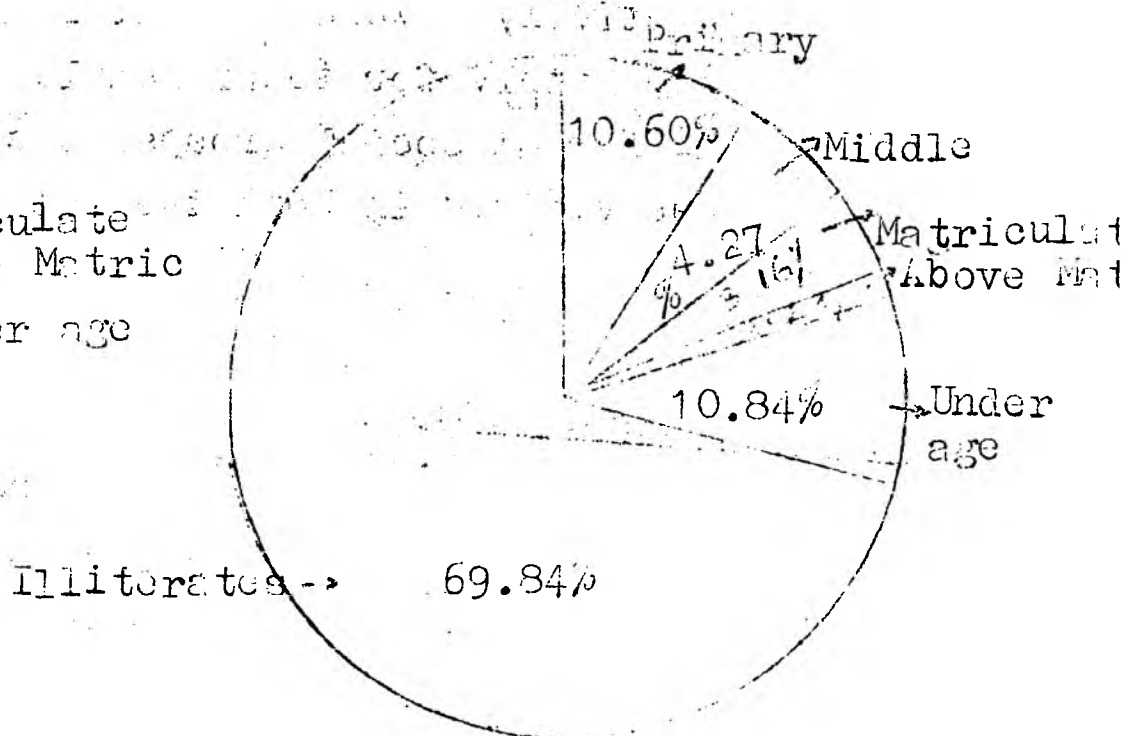
SMALL FARMERS



MARGINAL FARMERS



LANDLESS LABOURERS



ALL HOUSEHOLDS

only three women who got education above matriculation. Fig. XVII shows the educational pattern among different categories of households.

Main points emerging from the above discussion may be listed as follows:-

- (a) Overall literacy among the rural poor is about 19.32 per cent which is a little higher than the district average for rural areas.
- (b) Literacy among females is only 8.89 per cent which is far below the literacy among the males, i.e., 29.11 per cent.
- (c) Level of education among the females declines as the family assets decrease, because the educational status of landless women is very low as compared to women of small farmers.

Literacy distribution:

Some of the social groups in rural areas are very rigid to new adoptions and reluctant to encourage female education. Genesis of the problem of illiteracy among different social groups has been done to find out the main causes and their probable solutions.

Literacy distribution of small and marginal farmers and landless labourers among different social groups is given in table 2.6. Of the total literate population, 56.06 per cent literacy was found in higher castes and it went down to the extent of 29.55 and 14.39 per cent in case of backward classes and scheduled castes, respectively. When the literacy distribution was examined separately for total female and male population under different social groups, a similar trend found earlier was visible in both the categories of population. In

Table 2.6. Literacy distribution among different social groups.

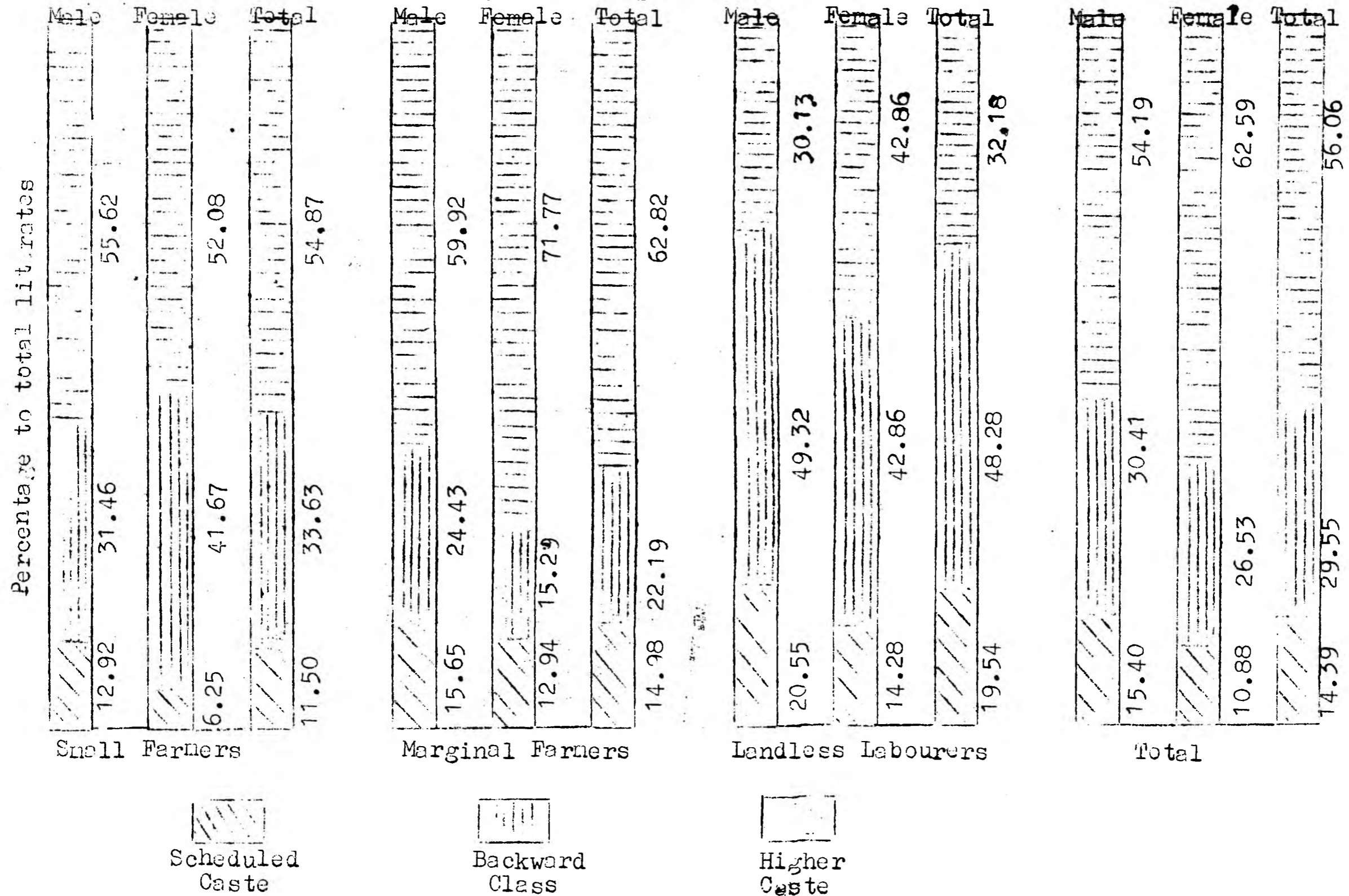
Social groups	Small Farmers			Marginal Farmers			Landless labourers			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Scheduled caste	23 (12.92)	3 (6.25)	26 (11.50)	41 (15.65)	11 (12.94)	52 (14.98)	15 (20.55)	2 (14.28)	17 (19.54)	79 (15.40)	16 (10.88)	95 (14.39)
Backward class	56 (31.46)	20 (41.67)	76 (33.63)	64 (24.43)	13 (15.29)	77 (22.19)	36 (49.32)	6 (42.86)	42 (48.28)	156 (30.41)	39 (26.53)	195 (29.55)
Higher caste	99 (55.62)	25 (52.08)	124 (54.87)	157 (59.92)	61 (71.77)	218 (62.82)	22 (30.13)	6 (42.86)	28 (32.18)	278 (54.19)	92 (62.59)	370 (56.06)
Total	178 (100)	48 (100)	226 (100)	262 (100)	85 (100)	347 (100)	73 (100)	14 (100)	87 (100)	513 (100)	147 (100)	660 (100)

Figures in parentheses show the percentage of their respective totals.

higher castes, female population reflected more literacy than male population, whereas the female population of backward classes and scheduled castes got lower position than the male population. The reason was that scheduled castes and backward classes could not afford to spend more on female education because of their meagre resources on the one hand, and preferred to spend some more amount on the education of male children to prepare them for some jobs; and, on the other hand, female population, from the very beginning, was forced to undertake some employment to earn something for their livelihood. In higher castes, female population got more opportunity for education due to social status and better economic conditions and male population was more particular to devote for their farm work. Female literacy distribution of scheduled castes varied from 6.25 per cent as minimum in the case of small farmers to 14.28 per cent as maximum in the case of landless labourers; while the male literacy of this social group varied from 12.92 per cent as minimum to 20.55 per cent as maximum for the same categories of farmers. Female literacy distribution of backward classes was again maximum, i.e., 42.86 per cent in the case of landless labourers and it was closely followed by small farmers, i.e., 41.67 per cent; whereas, in the case of marginal farmers, it was minimum. A similar trend was noted for male population also. Higher castes showed 42.86 per cent as minimum female literacy for landless labourers and 71.77 per cent as maximum for marginal farmers. The same pattern of literacy was also found in case of male population of this group. Female and male literacy of small and marginal farmers showed an increasing trend because of the rise in social status of these groups, while the picture was not the same in case of landless labourers. On the whole, the picture of literacy was not satisfactory. Distribution of literate male and female among different social groups can be seen through Fig. XVIII.

Fig. XVIII.

DISTRIBUTION OF LITERATE MALE AND FEMALE AMONG DIFFERENT SOCIAL GROUPS



The above discussion reveals that only 14.39 per cent of the total literates are from scheduled castes. Backward class and higher castes share 29.55 and 56.06 per cent of the total literates, respectively. In case of scheduled caste women, the condition worsens as they share only 10.83 per cent against 62.59 per cent shared by the higher castes.

Level of education:

Literacy rate alone among different social groups does not give the total picture about the skill and efficiency of the persons, but it is the level of education among the males and females of different social groups which presents a total picture. With this idea in view, details in respect of level of education have been worked out and these find place in table 2.7. Of the total educated population, 54.85 per cent was upto primary level and 22.12, 16.36 and 6.21 per cent population got their education upto middle, matriculation and above matriculation, respectively. The trained population was below 1 per cent. On examination of the total number of educated female population according to their various levels of education, 82.99 per cent were found to have got their education upto primary level and 13.61 per cent upto middle level. A very small percentage of the population of this group got their education upto matriculation and above matriculation levels; though the percentage of latter was a little higher, yet it was below the normal standards of education. This group of population could not at all participate in trainings.

In case of male educated population, the picture was considerably better and distribution of educated population at different levels was encouraging than that of the female population. Of the total male educated

Table 2.7. Level of education among different social groups

Level of education	Scheduled Caste			Backward Class			Higher Caste			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Primary	33 (41.77)	15 (93.75)	48 (50.53)	83 (53.20)	35 (89.74)	118 (60.51)	124 (44.60)	72 (73.26)	196 (52.97)	240 (46.78)	122 (82.99)	362 (54.85)
Middle	21 (26.58)	1 (6.25)	22 (23.16)	40 (25.64)	4 (11.26)	44 (22.57)	65 (23.38)	15 (16.30)	80 (21.62)	126 (24.56)	20 (13.61)	146 (22.12)
Matriculation	24 (30.38)	-	24 (25.26)	25 (16.03)	-	25 (12.82)	57 (20.50)	2 (2.18)	59 (15.95)	106 (20.86)	2 (1.36)	108 (16.36)
Above matriculation	-	-	-	7 (4.49)	-	7 (3.59)	31 (11.15)	3 (3.26)	34 (9.19)	38 (7.41)	3 (2.04)	41 (6.21)
Training	1 (1.27)	-	1 (1.05)	1 (0.64)	-	1 (0.51)	1 (0.36)	-	1 (0.27)	3 (0.59)	-	3 (0.46)
Total	79 (100)	16 (100)	95 (100)	156 (100)	39 (100)	195 (100)	278 (100)	92 (100)	370 (100)	513 (100)	147 (100)	660 (100)

Figures in parentheses show the percentage in their respective totals.

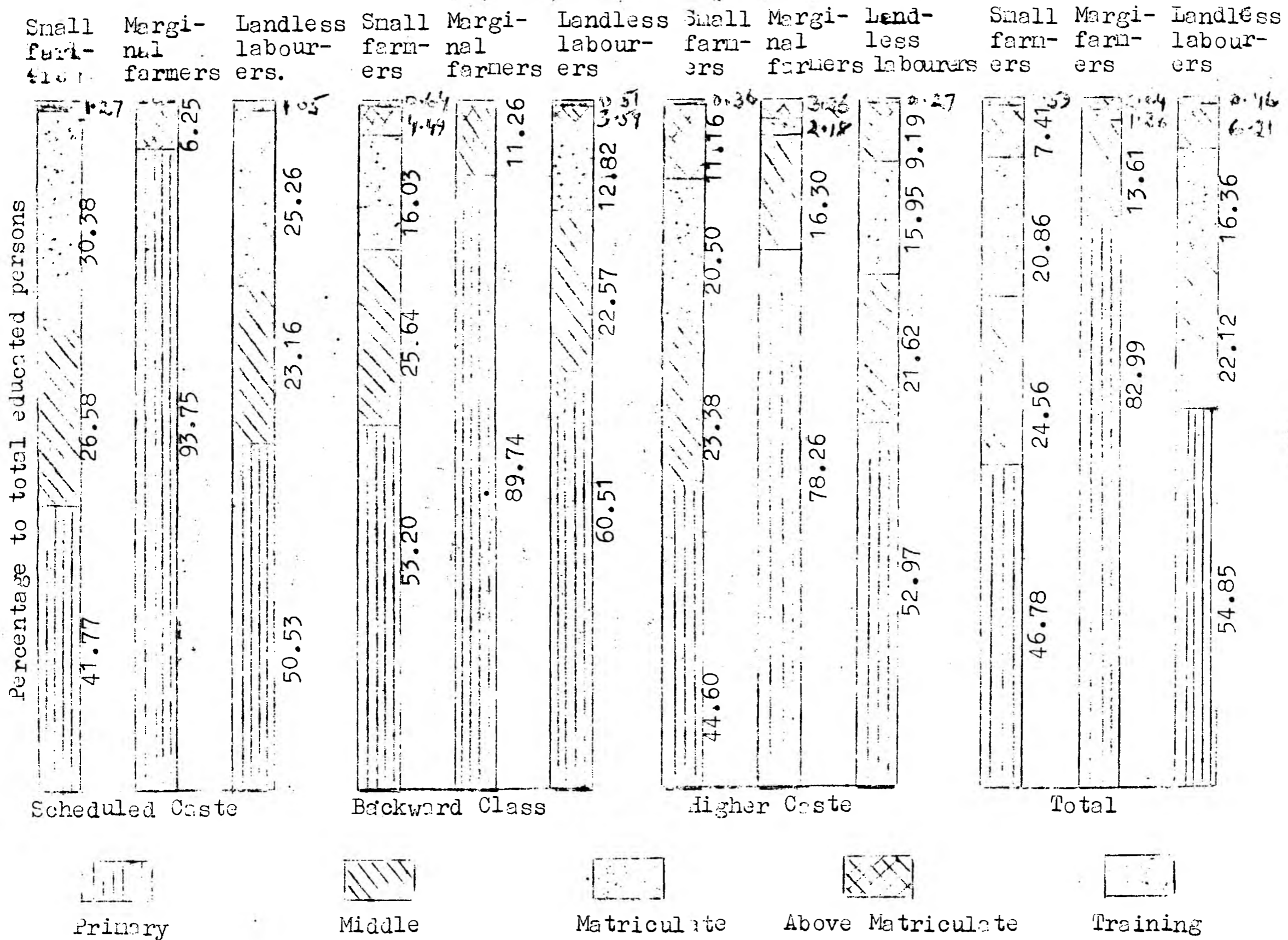
population, 46.78 per cent got their education upto primary standard, 24.56 per cent upto middle standard, 20.66 per cent upto matriculation and 7.41 per cent above matriculation. Again, trained population of this group reflected a very disappointing picture. On cross-examination of education level under different classes, it was found that more than 73 per cent of the total female educated population was limited upto primary level; whereas, upto middle standard, it was 6.25 per cent as minimum for scheduled castes and 16.30 per cent as maximum for higher castes. After middle and above matriculation standards, there was none in case of scheduled castes and backward classes, whereas 2.18 and 3.26 per cent of the total female educated population of higher castes got their education upto matriculation and above. In case of education level of male population under different classes, the education upto primary level varied from 41.77 per cent as the minimum in scheduled castes to 53.70 per cent as maximum in backward classes. The middle and matriculation level of education of this group was found to be 26.58 per cent as the maximum in scheduled castes. The higher castes' percentage was 11.15 of the total educated male population who received education above matriculation level.

It means that no emphasis was given to impart formal/informal education to the rural poor of this locality. Therefore, the scope of cottage and other small-scale industries was limited.

It may be noted here that the general level of education was lowest among scheduled castes as compared to backward class and higher castes. ^(Fig. xix) It is more significant in case of women. Among 16 literate scheduled caste women, only one has got education upto middle standard and the rest are educated upto primary level; while, in case of backward class - out of 39 total educa-

Fig. XIX.

LEVEL OF EDUCATION AMONG DIFFERENT SOCIAL GROUPS



ted women, four are middle and the rest are primary pass; but in higher castes, out of 92 total literate women, 15 were middle, 2 matriculates, 3 above matriculation and the rest 72 were primary. Thus, among higher castes, the level of education was also high.

Distribution of women workers according to age-groups

The specific purpose behind locating the labour force of female workers under different categories and age-groups and to work out the number of working women per household, is to determine suitable employment opportunities based on existing availability under different categories and age-groups. In the following paragraphs, an attempt has been made to study the existing pattern of distribution of women workers according to different age-groups under different categories such as, small and marginal farmers, and landless labourers, and data in this respect is contained in table 2.3. (see also Fig. XX).

The average number of working women per household was 2.83, varying from 2.73 as minimum in the case of marginal farmers and 3.12 as maximum in small farmers. Out of total population, 30.54 per cent of the female workers were found to be in the age-group of 10-15 years, 68.60 per cent in the most active age group of 15-60 years and, probably, above 60 years of age, there were no female workers available as it indicated below one per cent. An examination of women workers under different age groups and different categories also established more or less the same pattern. One can safely conclude that school-going children in the age-group of 10-15 years alone contributed more than 30 per cent and this labour force needs encouragement for proper education to gain some more useful employment.

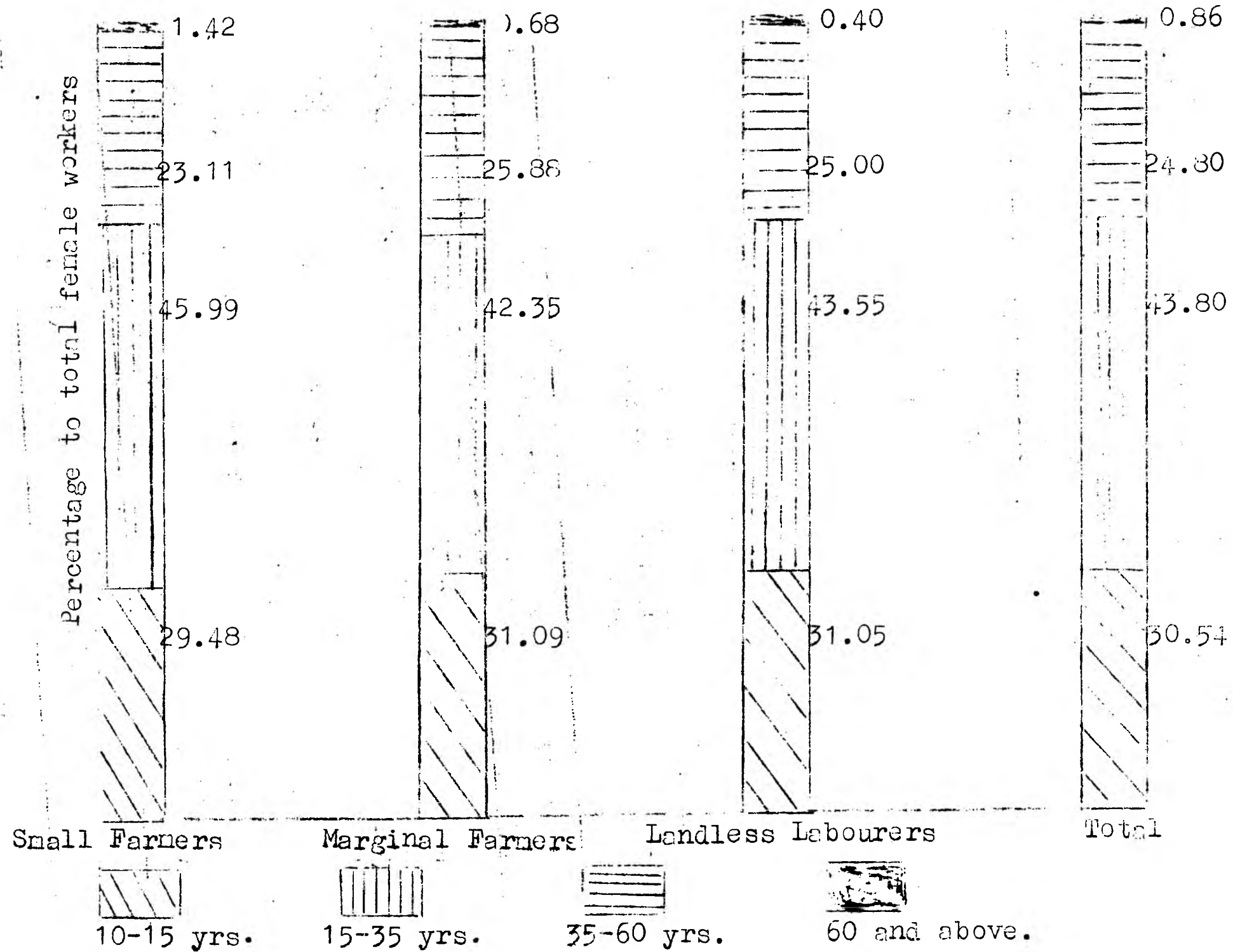
TABLE 2.3. Distribution of female workers according to different age-groups under different categories.

Age-group	Small farmers	Marginal farmers	Landless labourers	Total
10-15 years	125 (29.48)	135 (31.09)	77 (31.05)	337 (30.54)
15-35 years	195 (45.99)	252 (42.35)	108 (43.55)	555 (43.80)
35-60 years	98 (23.11)	154 (25.88)	62 (25.00)	314 (24.30)
60 and above	6 (1.42)	4 (0.68)	1 (0.40)	11 (0.86)
Total	424 (100.00)	595 (100.00)	248 (100.00)	1267 (100.00)
Number of working women per household.	3.12	2.73	2.67	2.83

Figures in parenthesis show the percentage of total.

Main labour force of women workers was found in the age-group of 15-60 years. More emphasis needs to be given to a strategy of employment for this age-group.

Fig. XX. DISTRIBUTION OF FEMALE WORKERS ACCORDING TO DIFFERENT AGE-GROUPS



Occupational distribution of rural women

When some socio-economic studies are conducted with various objectives, occupational distribution always provides a base to such studies. Since the main objective of the present studies is to create more employment opportunities to rural poor we have made efforts to find out the occupational distribution of rural women under different categories to observe their existing trend and concentration of employment to a particular occupation. This would provide a base to the planners to find ways and means for increasing their involvement in various occupations by providing modern technology. Data regarding occupational distribution of rural women is given in Table 2.9.

Of the total women workers, 55.59 per cent got opportunity for productive work and the remaining 44.41 per cent were engaged in household jobs, as revealed in table 2.9. The women workers of small farmers category had a little higher opportunity for productive work as they got some farm employment while this was accordingly reduced in the case of marginal farmers and landless labourers where such opportunities declined. Out of the total women working force, 74.89 per cent were full-time productive workers and 25.11 per cent were part-time productive workers. The maximum percentage of full-time productive workers was found in marginal farmers (86.69), followed by landless labourers (70.45) and the minimum percentage share went to small farmers (62.00). The main occupations of rural women were farming, wage work, tailoring, weaving and spinning, dairying and sheep & goat rearing, which engaged 29.27, 26.52, 12.84, 10.04, 4.73 and 2.65 per cent, respectively, of the total production workers.

When the occupations in different categories were examined, small farmers showed that the maximum number (63.23 per cent) was in farm, followed by wage work (16.77 per cent), and dairying, weaving and spinning, tailoring,

Table 2.9. Occupational distribution of rural women

Sr. No.	Occupation	Small Farmers	Marginal Farmers	Landless Labourers	Total
1.	Farming	98 (63.23)	146 (52.14)	16 (17.20)	260 (29.27)
2.	Wage work	26 (16.77)	56 (20.00)	58 (62.37)	140 (26.52)
3.	Weaving and spinning	9 (5.31)	36 (12.35)	8 (8.60)	53 (10.04)
4.	Dairying	12 (7.74)	12 (4.29)	1 (0.08)	25 (4.73)
5.	Tailoring	4 (2.58)	11 (3.93)	-	15 (2.84)
6.	Sheep and goat rearing	3 (1.94)	6 (2.14)	5 (5.38)	14 (2.65)
7.	Hair dressing	1 (0.65)	5 (1.79)	1 (1.08)	7 (1.33)
8.	Shop-keeping	2 (1.29)	2 (0.71)	2 (2.15)	6 (1.14)
9.	Tie and dye	-	3 (1.07)	-	3 (0.57)
10.	Piggery	-	1 (0.36)	1 (1.08)	2 (0.38)
11.	Trained Dai	-	1 (0.36)	-	1 (0.19)
12.	Pottery	-	1 (0.36)	-	1 (0.19)
13.	Bangle-selling	-	-	1 (1.08)	1 (0.19)
14.	Poultry	-	-	-	-
	Full-time Productive workers	155 (62.00)	280 (86.69)	93 (70.45)	528 (74.89)
	Part-time Productive workers.	95 (38.00)	43 (13.31)	39 (29.55)	177 (25.11)
	Mainly Household workers.	-	-	-	-
	Total (Productive work)	250 (58.96)	323 (54.29)	132 (53.23)	705 (55.59)
	Total (Household work)	174 (41.04)	272 (45.71)	116 (46.77)	562 (44.41)
	GRAND TOTAL	424 (100.00)	595 (100.00)	248 (100.00)	1267 (100.00)

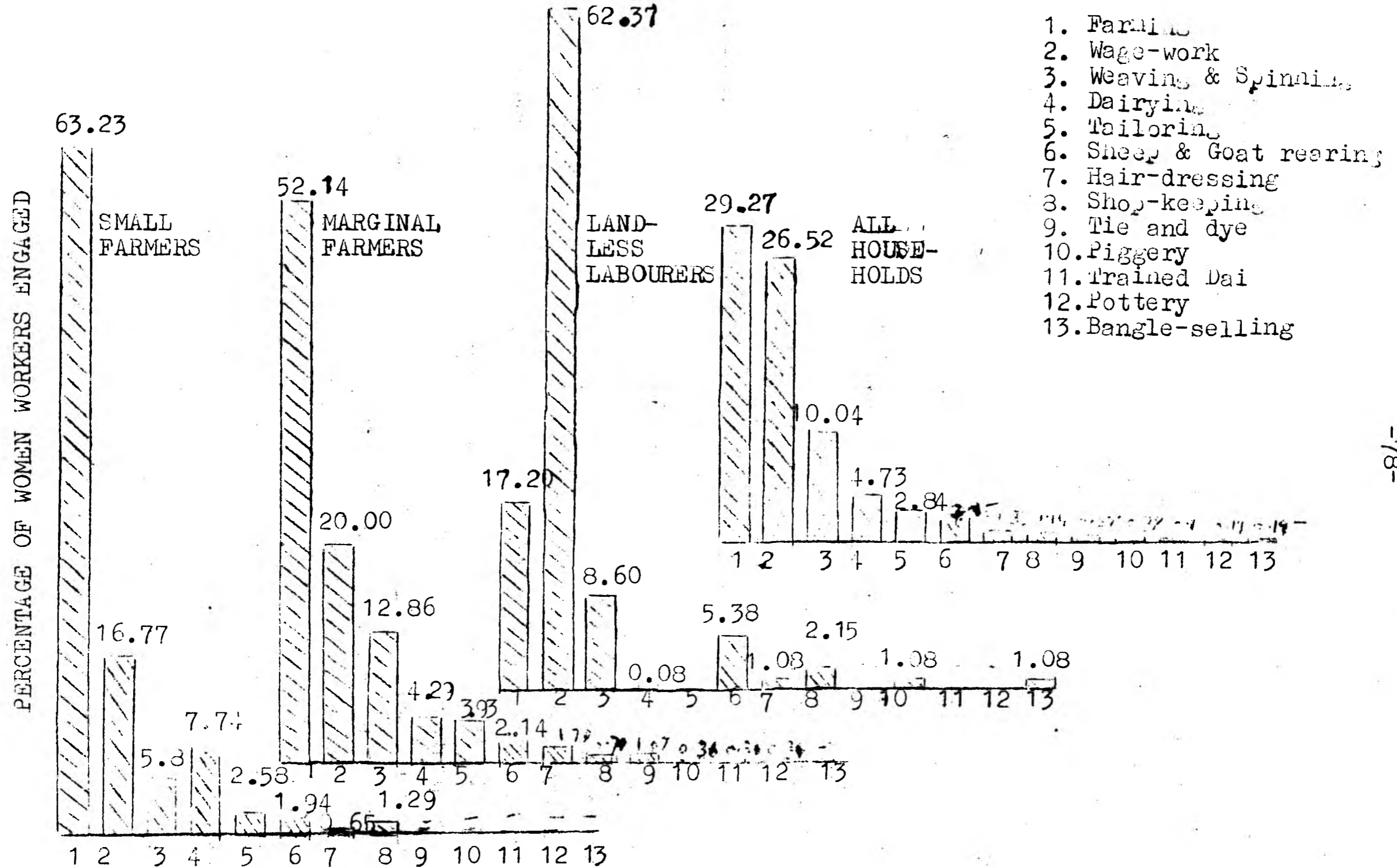
Figures in parentheses show the percentage of their respective totals.

sheep & goat rearing, and shop-keeping were other occupations in a similar order, which engaged 7.74, 5.81, 2.58, 1.94 and 1.29 per cent of the total production workers among small farmers category. Marginal farmers' main occupation was also farming, which formed 52.14 per cent, followed by wage work (20 per cent) and weaving & spinning, dairying, tailoring, sheep and goat rearing and hair-dressing were other occupational sources according to their preference which showed 12.86, 4.29, 3.93, 2.41 and 1.79 per cent of the total productive workers among marginal farmers category. In the case of landless labourers, the maximum number (62.37 per cent) was occupied in wage work, followed by farming (17.20 per cent). Other occupations, adopted on priority basis, included weaving and spinning, sheep and goat rearing, shop-keeping, piggery, hair-dressing, bangle-selling, which showed 8.60, 5.38, 2.15, 1.08 and 1.08 per cent of the total productive workers among landless labourers, respectively. (Fig. XXI).

From the above results, one can draw a conclusion that farming is still the most potential scope in the region to provide more employment opportunities to all the three categories of rural women. Therefore, a training of this profession, with emphasis on improved methods of cultivation, can go a long way in making them more proficient. By increasing the water use efficiency, the rural women will be more involved in agricultural operations and, thereby, increase the food production and augment family income. For providing more wage work to rural women, some of the occupations, identified according to their choice of preference, need special attention of the policy makers. However, one has to identify these occupations by integrating all the main, secondary, tertiary and other subsidiary occupations in a fashion that

FIG. XXI.

OCCUPATIONAL DISTRIBUTION OF RURAL POOR WOMEN



the best utilization of rural working force throughout the year may be possible to improve their existing employment opportunities.

Employment level

So as to create more employment opportunities, one would be tempted to know the existing level of employment in a particular region. For this specific purpose, we have made a survey of the region so as to know the existing level of employment of rural women who played a very dominating role in household economy. The results obtained have been reported in table 2.10 and the description of the same is given in the following paragraphs.

Table 2.10. Employment level of rural women

Particulars	Small farmers	Marginal farmers	Landless labourers	Total
Total number of productive working days.	27840	35128	10465	73433
Total number of women workers (productive)	250	323	132	705
Average number of productive working days.	111	109	79	104

On an average, productive working days of rural women of this region were found to be 104 in a year, suggesting that they were employed in different occupations for about three months in a year. An examination of the total number of productive working days of women workers in various economic activities in different categories revealed that

small farmers took the lead by showing 111 days, followed by the women of marginal farmers category which suggested 109 working days in a year. The rural women of landless labourers category had the opportunity of getting themselves employed for not more than 79 days in a year.

This again established the fact pointed out earlier that farming is still providing more employment opportunities to the rural women of this region who got some more opportunity to work on the farms than the rural women of marginal farmers and landless labourers. However, farming alone cannot absorb whole of the working force of rural women, but other subsidiary occupations listed in table 2.9 also require special attention in order to increase overall employment of the rural women for improving their purchasing power.

Housing facilities

One of the economic goals of such surveys is to find out the various aspects of social uplift and the existing physical facilities for the comforts of the rural poor. Housing facilities, being the third primary need after food and clothing, need special attention. Moreover, rural women are given the major responsibility of cleanliness and proper maintenance of their houses and of keeping the requirements at proper places. In addition to this, they discharge all the work pertaining to kitchen, cooking, storage of grains and foods, including animal feeds, and disposal of garbage. These activities require educational skill and modern knowledge for doing the job scientifically and efficiently. With this specific idea, we have included this item in our study and data regarding housing facilities has been presented in table 2.11. A detailed picture can also be seen in Fig. XXII.

Table 2.11. Housing Facilities in different categories

Sr. No.	Facilities	Small Farmers	Marginal Farmers	Landless Labourers	Total
I. HOUSING					
	<u>Type of dwelling</u>				
(a)	Kacha	69 (50.74)	101 (46.33)	75 (80.64)	245 (54.81)
(b)	Pucca	54 (39.70)	84 (38.53)	13 (13.98)	151 (33.78)
(c)	Kacha and pucca	13 (9.56)	33 (15.14)	5 (5.38)	51 (11.41)
	Total	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)
II. BAITHAK					
(a)	Families not having Baithak	112 (82.35)	189 (86.70)	86 (92.47)	387 (86.58)
(b)	Families having Baithak	24 (17.65)	29 (13.30)	7 (7.53)	60 (13.42)
	Total	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)
III. NUMBER OF ROOMS					
(a)	One Room	6 (4.41)	25 (11.47)	16 (17.20)	47 (10.51)
(b)	Two-rooms	55 (40.44)	83 (38.07)	45 (48.39)	183 (40.94)
(c)	Three-rooms	46 (33.82)	64 (29.36)	23 (24.73)	133 (29.75)
(d)	Four-rooms	20 (14.71)	30 (13.76)	3 (3.23)	53 (11.86)
(e)	More than four-rooms	9 (6.62)	16 (7.34)	6 (6.45)	31 (6.94)
	Total	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)
IV. KITCHEN					
(a)	Indoor	104 (76.47)	144 (66.05)	70 (75.27)	318 (71.14)
(b)	Outdoor	32 (23.53)	74 (33.95)	23 (24.73)	129 (28.86)
	Total	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)

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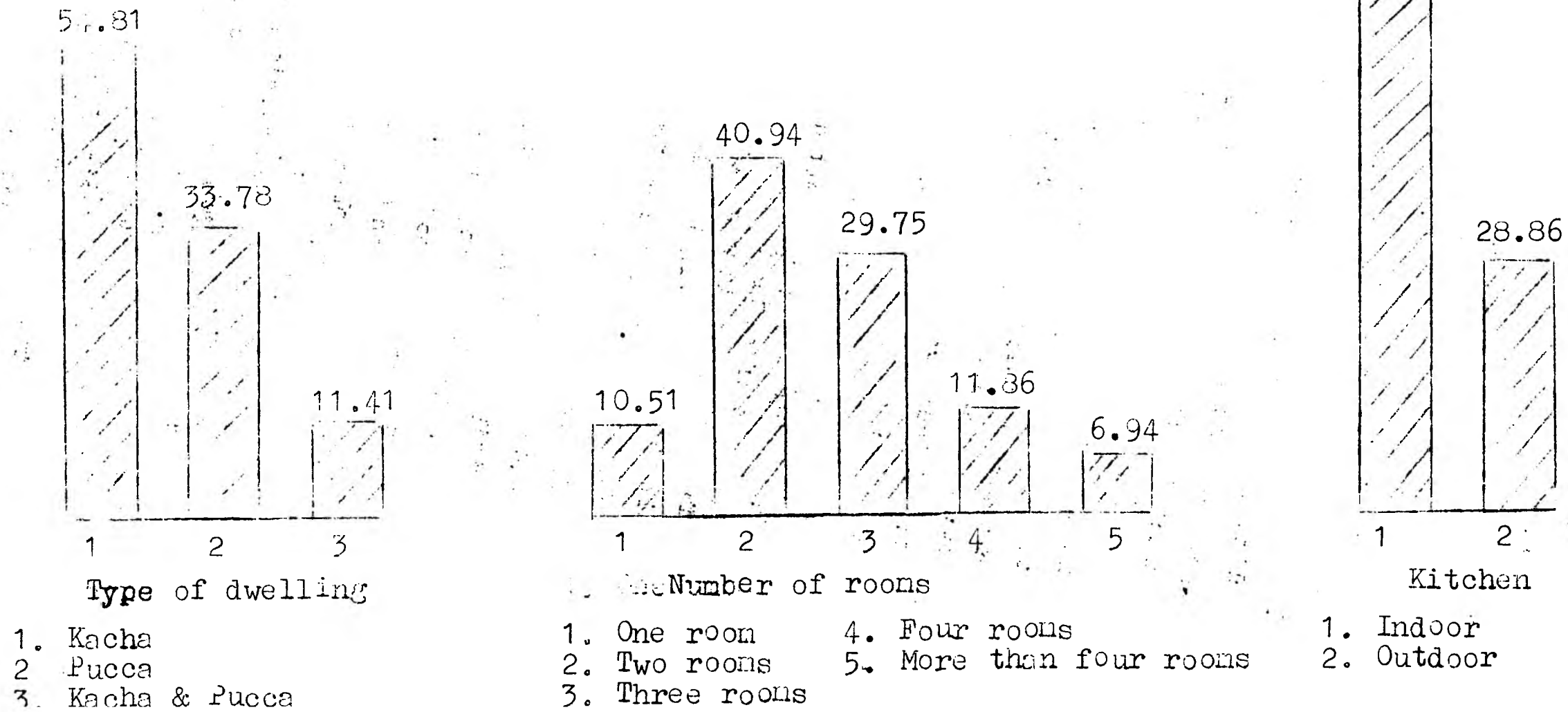
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Sr. No.	Facilities	Small Farmers	Marginal Farmers	Landless Labourers.	Total
V. COOKING FACILITIES					
(a)	Earthen Chulha	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)
(b)	Hara	12 (8.82)	25 (11.46)	6 (6.45)	43 (9.62)
(c)	Tandoor	9 (6.61)	20 (9.17)	8 (8.60)	37 (8.29)
(d)	Kerosene stove	15 (11.02)	13 (5.96)	4 (4.30)	32 (7.16)
(e)	Smokeless chulha	-	-	-	-
(f)	Angithi Portable	-	-	-	-
(g)	Gobar Gas	-	-	-	-
	Total	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)
VI. GROUND AND DRAINAGE					
	Drains in home	96 (70.58)	139 (63.76)	57 (61.29)	292 (65.32)
	Types:				
(a)	Kacha	58 (60.42)	98 (70.51)	55 (96.50)	211 (72.26)
(b)	Pucca	38 (39.58)	41 (29.49)	2 (3.50)	81 (27.74)
	Soakpits	-	-	-	-
	Septic Tanks	-	-	-	-
	Water Supply - adequate	102	130 (59.63)	42 (45.16)	274 (61.30)
	Water supply - inadequate.	34 (25.00)	88 (40.37)	51 (54.84)	173 (38.70)
	Total	136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)

Figures in parentheses show the percentage of their respective totals.

Fig. XXII.

HOUSING FACILITIES FOR THE RURAL POOR
(Percentage of households)



Of the total 447 households, 54.81 per cent had kacha houses and 33.78 per cent households could manage to construct pucca houses and the remaining 11.41 per cent households depended on mixed kacha and pucca houses. When the situation of kacha and pucca houses was examined under different categories of farmers and labourers, the percentage of households having pucca houses declined from 39.20 per cent for small farmers to 13.98 per cent for landless labourers, suggesting that the availability of pucca houses declined as the financial status of the households went down. Almost a reverse trend in case of households who had constructed kacha houses, was found except that the number of houses of marginal farmers were a little less than the households of small farmers, but a sharp decline was noticed in the case of landless labourers. Households falling under the category of marginal farmers took the lead in constructing kacha and pucca (mixed) houses, i.e., 15.14 per cent, whereas the minimum number of households, i.e., 5.38 per cent was found in the case of landless group.

Facilities of drawing room, commonly known as 'Baithak' in the villages were limited. Of the total households, 17.65 per cent of small farmers only could afford to have such facilities and it went down to the extent of 7.53 per cent in the case of landless labourers. Possession of two-room set was with 40.44 per cent households of small farmers, and as the number of rooms increased, this percentage declined and 6.62 per cent households only had more than four rooms. A similar trend of such facilities was also noticed for the households falling under the categories of marginal farmers and landless labourers. However, nearly 50 per cent of the households of landless labourers had only two-room sets. Of the total households, 71.14 per cent had their indoor kitchen, whereas 28.86 per cent households were found maintaining their outdoor kitchen, and marginal farmers depended mainly on outdoor kitchen facilities as compared to small farmers and landless labourers. In all the three categories, all the households had earthen chullah but a few also kept kerosene stoves. The number of such stoves was maximum with small farmers and minimum with landless labourers. In addition to these facilities, some households also managed 'Tandoor' and 'Hara - a

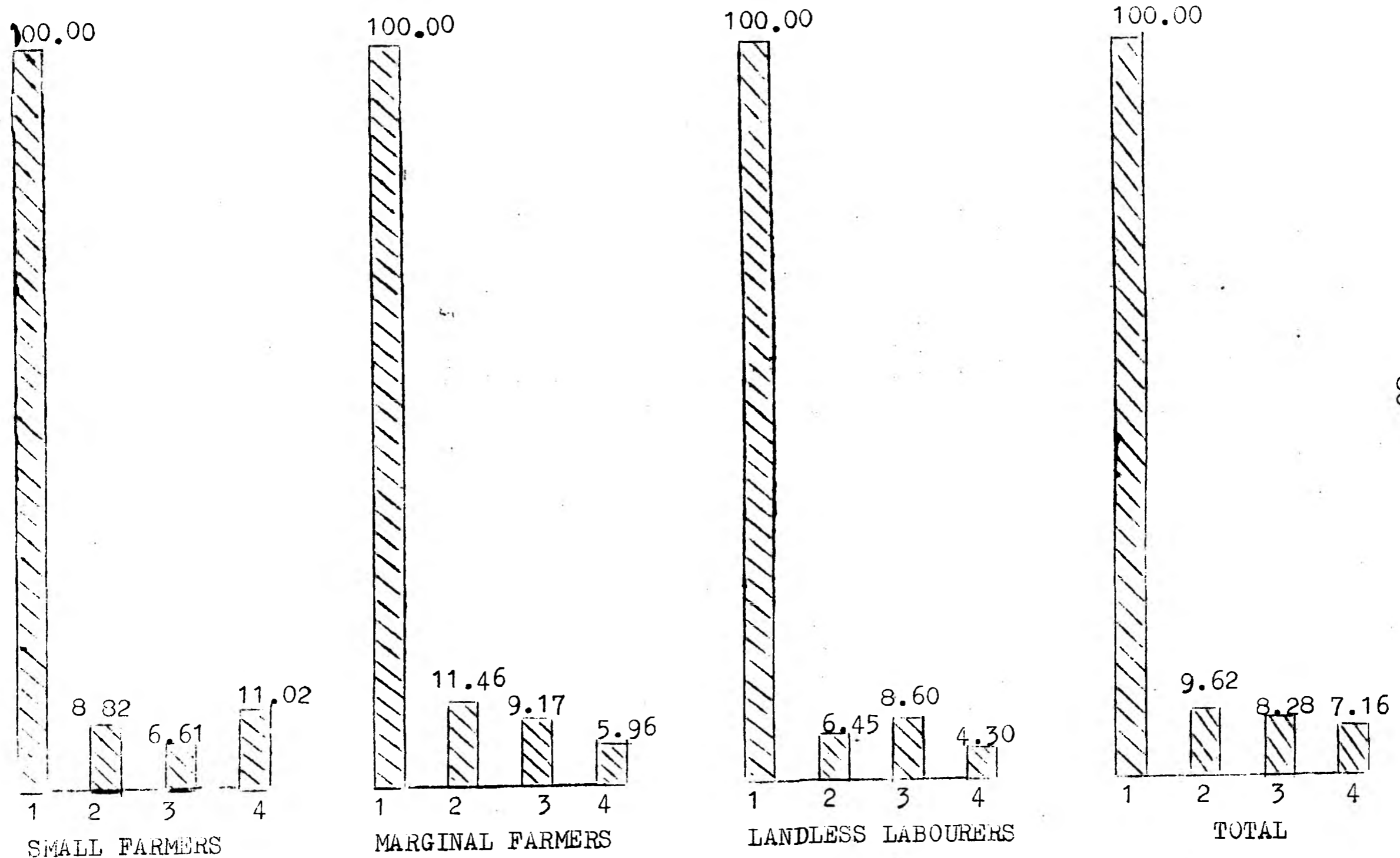
special local cooking structure meant for the preparation of 'tandoori chapati'. (For details see Fig. XXIII).

Drainage and water-supply systems were also examined and it was found that 65.32 per cent of the total households had drains in their houses, of which 72.26 per cent had kacha drains and 27.74 per cent had pucca drains. Landless labourers mostly depended on kacha drains whereas 39.58 and 24.49 per cent households of small and marginal farmers, respectively, managed to construct 'pucca' drains. Of the total households, 61.30 per cent households had adequate water supply whereas still 38.70 per cent had inadequate water supply system. In case of small farmers, 75 per cent households had adequate water supply and this percentage declined to 45.16 per cent in the case of landless labourers.

From the foregoing discussions, one can observe that still two-third population of this region resided in kacha houses and incurred lot of expenditure on their maintenance. As a matter of fact, majority of them were willing to construct pucca houses, but the availability of desired initial capital for constructing such houses was a limiting factor. Housing facilities were far below their requirements, as about 50 per cent of the total landless households managed to live together in a set of only two rooms for all purposes. Kitchen being the primary need for cooking meals was not available inside the house in all the cases and about 30 per cent were having their kitchen in the open. Drainage and water supply systems also needed improvement, as nearly 72 per cent households had kacha drains. Even adequate water supply was not possible for about 40 per cent of the households covered under the survey. In order to provide them with these minimum facilities so as to ensure their reasonable standard of life, proper education and availability of funds would be required.

Fig. XXIII.

COOKING FACILITIES IN DIFFERENT CATEGORIES OF HOUSEHOLDS
(Percentage of Households)



1. Earthen Chulha, 2. Hara. 3. Tandoor, 4. Kerosene stove

Storage facilities

Storage is a big problem among rural poor. After putting a lot of labour, capital and management, some things are produced or collected by this section of the society for immediate consumption and to meet the future requirements. Many times, due to lack of scientific and modern storage facilities, they suffer a great loss in their existing storage system. Sometimes, cooked foods are spoiled and become unhygienic as rural poor don't have proper facilities to store these in a cool place. During peak seasons when they are extremely busy till late hours, they cook their meals early morning and keep it for whole-day consumption with them at the farm site where they are at work. Water is inadequate and only a few wells are found fit in the villages for taking water, particularly for drinking purposes. For fetching water, they cannot go very frequently as these wells are generally located at some distance. They have to store water in earthen pitchers. To determine the existing facilities of storage, an attempt has been made and data collected on different methods of storage for grains, cooked foods and water, which are the most important items to be stored by rural families, are given in table 2.12.

Of the total households, 72.48 per cent were dependant on gunny bags for storing their grains. When the position was examined separately for different categories of households, it was between 71 to 73 per cent in all the cases. The second important method of grain storage in this area were earthen pitchers, which were used by 25.5 per cent of the total households. However, the use of these pitchers was maximum (35.48 per cent) in the case of landless labourers, followed by small farmers (27.21 per cent) and marginal farmers (20.18 per cent). The third important method was found 'kuthla' or 'kothi' - a special type of earthen storage structure used for storage of grains. 21.70 per cent of the total households were using it. Its use was maximum (30.88 per cent) with small farmers, followed by marginal farmers (23.39 per cent), and minimum (4.30 per

Table 2.12. Storing facilities for grains, food and water

Sr. No.	Method	Small Farmers	Marginal Farmers	Landless Labourers	Total
<u>1. Grains</u>					
(a)	Gunny bags	99 (72.79)	159 (72.94)	66 (70.97)	324 (72.48)
(b)	Pitchers	37 (27.21)	44 (20.18)	33 (35.48)	114 (25.50)
(c)	Kuthla and Kothi	42 (30.88)	51 (23.39)	4 (4.30)	97 (21.70)
(d)	Corners	18 (13.24)	32 (14.68)	6 (6.45)	56 (12.53)
(e)	Stores	23 (16.91)	18 (8.26)	2 (2.15)	43 (9.62)
(f)	Parchhatti	5 (3.68)	8 (3.67)	2 (2.15)	15 (3.36)
<u>2. Cooked food</u>					
(a)	Utensils	125 (91.91)	134 (61.47)	55 (59.20)	314 (70.25)
(b)	Earthen pots	35 (25.75)	77 (35.32)	43 (46.24)	155 (34.66)
(c)	Baskets	24 (17.65)	39 (17.89)	10 (10.75)	73 (16.33)
(d)	Almirah	23 (16.91)	33 (15.14)	6 (6.45)	62 (13.87)
(e)	Botas	16 (11.76)	23 (10.55)	10 (10.75)	49 (10.96)
<u>3. Water</u>					
(a)	Pitchers	131 (96.32)	218 (100.00)	84 (90.32)	433 (96.87)
(b)	Buckets	23 (16.91)	4 (1.83)	2 (2.15)	29 (6.49)
(c)	Drums	14 (10.29)	-	-	14 (3.13)
(d)	Tanks	4 (2.94)	2 (0.92)	1 (1.08)	7 (1.57)

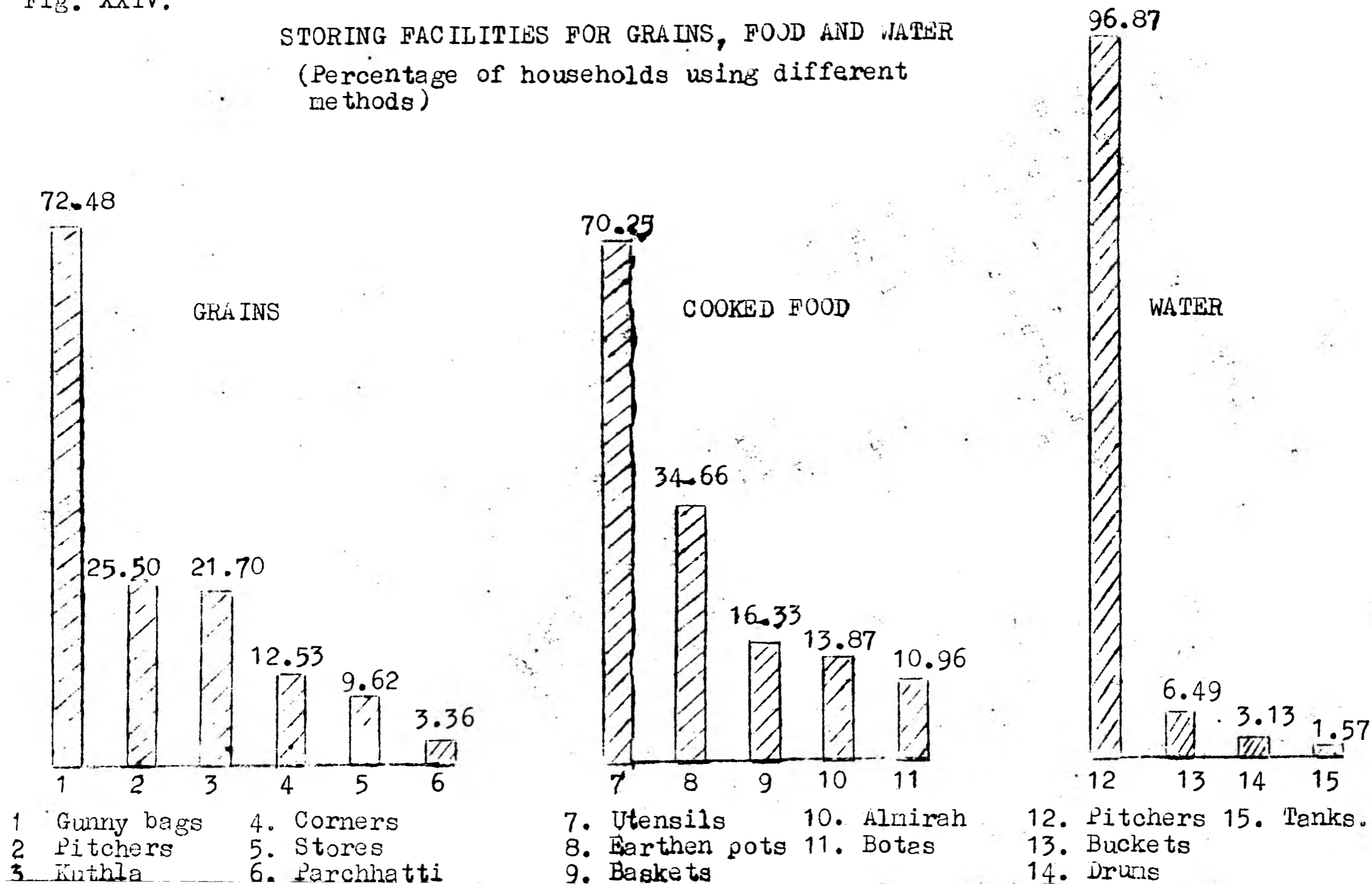
Figures in parentheses indicate the percentage to total number of households in each category.

cent) in the case of landless labourers. The fourth important method of grain storing was identified as corners of the houses which stored 12.53 per cent of the total households varying from 13.24 per cent as the maximum for small farmers, 6.45 per cent as the minimum for landless labourers. Grain stores were limited to 9.62 per cent of the total households and that, too, showing a sharp decline from 16.91 per cent for small farmers to 8.26 per cent for marginal farmers and 2.15 per cent for landless labourers, suggesting that as the economic status is reduced, such facilities were also reduced as they could not afford to spend on separate stores to be used for grains.

Cooked foods were kept mostly in utensils which covered 70.25 per cent of the total households and 91.91 per cent households of small farmers depended on such facilities, while 61.47 and 59.20 per cent households of marginal farmers and landless labourers, respectively, used this device. Earthen pots were the next important method and source for keeping cooked foods and 34.66 per cent of the households depended on this method, but landless labourers depended on this method up to an extent of 46.24 per cent while 25.75 per cent of the small farmer households also used this device. Many of them also used baskets which reflected 16.33 per cent of the households. Almost the same percentage was also found in the case of small and marginal farmers, but it was reduced to 10.75 per cent in the case of landless labourers. Some of the households used almirah bust - it was to the extent of 13.87 per cent, ranging from 16.91 per cent in small farmers to 6.45 per cent in landless labourers. Botes (paper mache product) also were used by 10.96 per cent households and there was not significant difference in this system when households of small and marginal farmers and landless labourers were compared separately.

Fig. XXIV.

STORING FACILITIES FOR GRAINS, FOOD AND WATER
 (Percentage of households using different methods)



Water storing was done mostly in pitchers which was prevalent in 96.87 per cent of the households in the region. Buckets, drums and cemented tanks were other devices for storing water and accounted for 6.49, 3.13 and 1.57 per cent of the households. Fig. XXIV presents detailed picture of storing facilities for grains, food and water available to the rural poor.

One can conclude that storage facilities with rural poor were of traditional nature and provided more chances of frequent losses. In this modern age, majority of the households used gunny bags for grain storage. Still cooked foods were kept in earthen pots by about 35 per cent of the households and nearly 97 per cent households were using pitchers for water storage. These storage facilities require to be improved upon from both the angles to avoid the considerable economic losses and unhygienic methods of food and water storage for sound health. Proper education through trainings would be required.

Problems of house rats and pests

A poor man's house provides shelter for his enemies. Due to traditional existing facilities of grain storage, rural poor always face lot of problems due to rats and pests. A considerable damage to their grains and food articles is being done due to rats and pests attack. To study the types of pests found in the houses of poor ones for taking necessary measures, informations were collected and the same are presented in table 2.13. Fig. XXV shows the poor households infested with house-rats and pests.

It was observed during the investigation that in all the houses rats were found and all the households were also infested by mosquitoes and house flies. Mice, bed bugs, termites, cockroaches and ticks and mites were also found with many of the households. Details of the number and percentage of households who faced problems of these pests can be seen in table 2.13. The problems of termites, cockroaches and ticks and mites were reported more in case of small farmers than the marginal farmers and landless labourers.

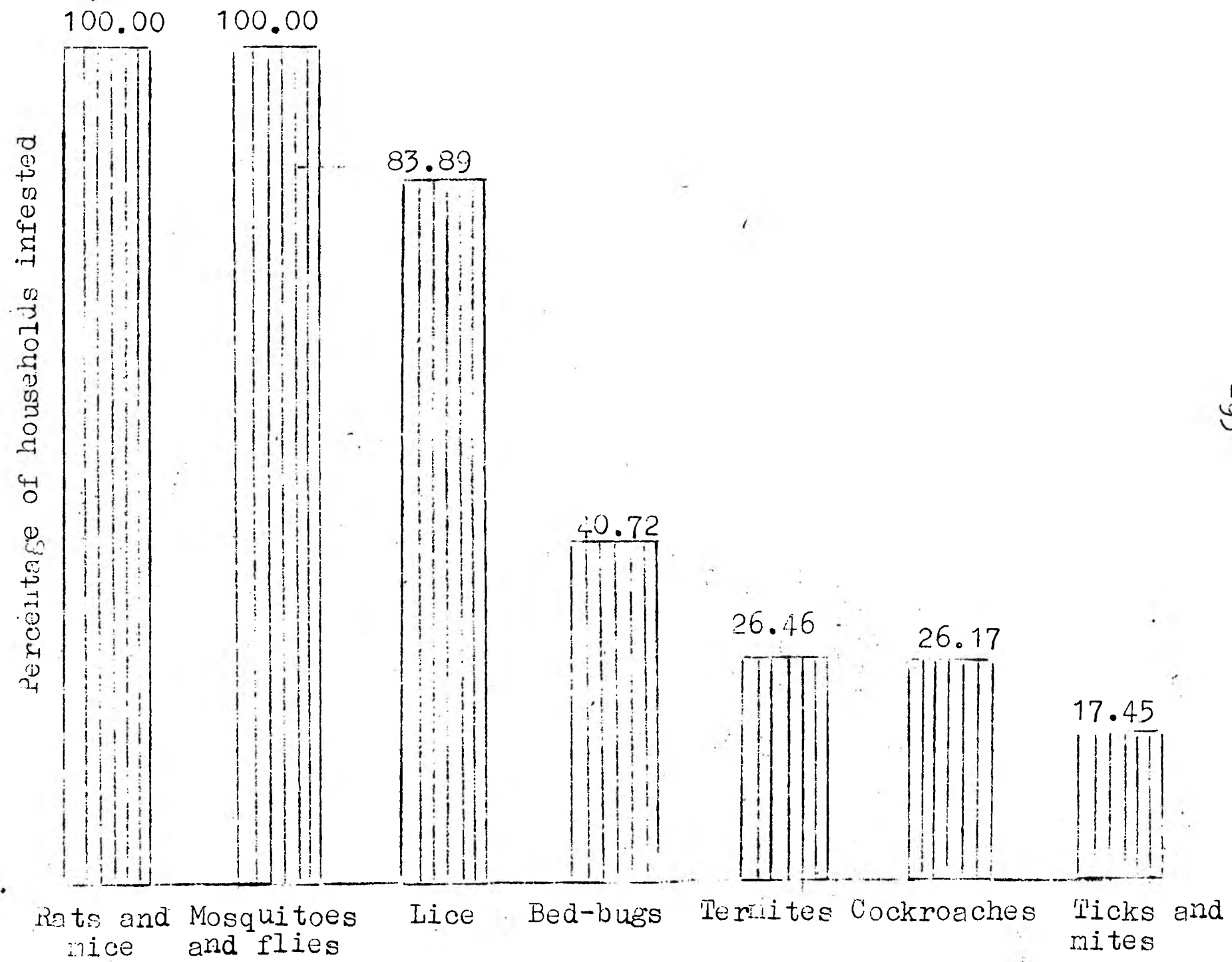
Table 2.13. Problems of house-rats and pests in different categories

Sr. No.	Particulars	(Number of households)			Total
		Small Farmers	Marginal Farmers	Landless Labourers	
1.	Rats and mice	136 (100.00)	213 (100.00)	93 (100.00)	447 (100.00)
2.	Mosquitoes and flies	136 (100.00)	213 (100.00)	93 (100.00)	447 (100.00)
3.	Lice	115 (84.55)	175 (80.27)	85 (91.39)	375 (83.89)
4.	Bed bugs	71 (52.20)	72 (33.02)	39 (41.93)	182 (40.72)
5.	Termites	48 (35.29)	51 (23.39)	19 (20.43)	118 (26.40)
6.	Cockroaches	49 (36.02)	57 (26.14)	11 (11.82)	117 (26.17)
7.	Ticks and mites	25 (18.38)	39 (17.88)	14 (15.05)	78 (17.45)

Figures in parentheses show the percentage of total number of households in each category.

Fig. XXV.

PROBLEMS OF HOUSE-RATS AND PESTS



All these observations established that there is a considerable scope to undertake some timely precautions to protect the rural poor from these insects and pests, to keep them healthy and provide better working conditions.

Water supply and garbage disposal

For keeping rural poor healthy and protecting them from epidemics, pure water supply must be ensured and should be free from contaminations. In the villages, mostly out-breaks of epidemics are found through water and unscientific disposal of garbage. From this point of view, it is important to study the existing situations in this area. Therefore, information on different sources of water supply and modes of garbage disposal was collected and is compiled in table 2.14.

An interesting observation was made that still 69.35 per cent of the total households used tank and canal water whereas this varied from 65.44 per cent in small farmers to 74.19 per cent in landless labourers. Wells are another important source which accounted for 68.00 per cent of the households who used water for drinking purposes. Hand pumps were used by 32.66 per cent of the total households, ranging from 35.29 per cent as maximum for small farmers and 22.58 per cent as minimum for landless labourers. The most perfect system of water supply in the villages was found to be taps, but it covered hardly 8.50 per cent households ranging from 6.61 per cent for small farmers to 9.67 per cent for landless labourers, as they wanted water mostly for **their** drinking purposes whereas small farmers also wanted more water for their animals, which was not possible through this source to meet their entire requirements.

Disposal of garbage gave a pitiable situation when 82.55 per cent households left it scattered in open around their houses and it was found with more than 90.00 per cent households of landless labourer groups. Garbage used for manuring purposes was found with 57.00 per cent of the households. This

Table 2.14. Sources of water supply and mode of garbage disposal among different categories of households.

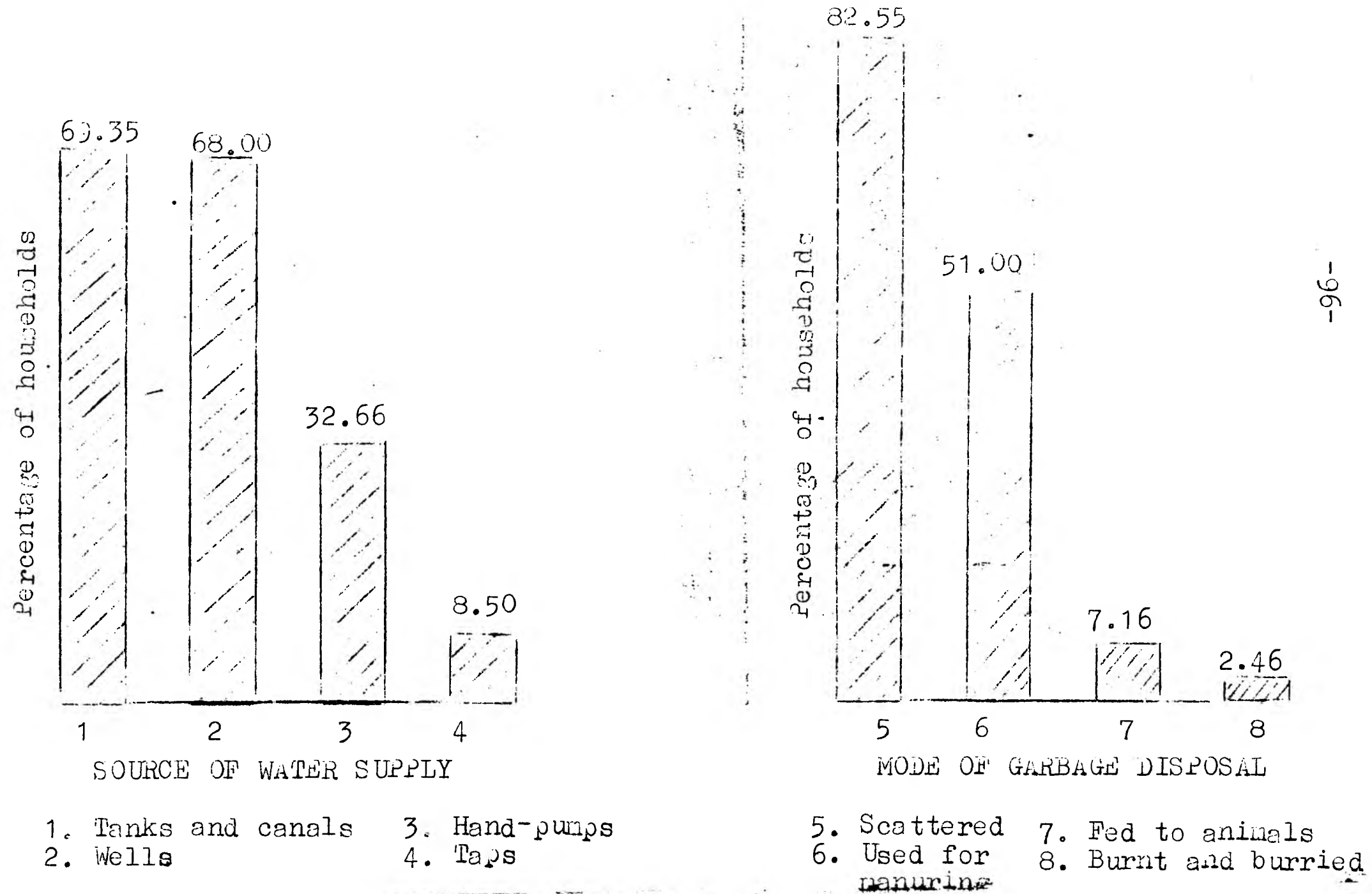
(Number of households)

Sr. No.	Particulars	Small Farmers	Marginal Farmers	Landless Labourers	Total
<u>I. Sources of water supply</u>					
(a)	Tanks and canals	89 (65.44)	152 (69.72)	69 (74.19)	310 (69.35)
(b)	Wells	80 (58.82)	153 (70.18)	71 (76.34)	304 (68.00)
(c)	Hand-pumps	48 (35.29)	77 (35.32)	21 (22.58)	146 (32.66)
(d)	Taps	9 (6.61)	20 (9.17)	9 (9.67)	38 (8.50)
<u>II. Garbage disposal</u>					
(a)	Scattered	107 (78.67)	178 (81.65)	84 (90.32)	369 (82.55)
(b)	Used for manuring	100 (73.52)	112 (51.37)	16 (17.20)	228 (51.00)
(c)	Fed to animals	16 (11.76)	15 (6.88)	1 (1.07)	32 (7.16)
(d)	Burning and burrying	-	3 (1.37)	8 (8.60)	11 (2.46)

Figures in parentheses show the percentage of the total households in each category.

Fig. XXVI.

SOURCES OF WATER SUPPLY AND MODE OF GARBAGE DISPOSAL
AMONG POOR HOUSEHOLDS



farmers, i.e. 73.52 per cent, whereas it declined to 17.20 per cent in case of landless labourers. The small farmers used to feed some of the refuse to their animals whereas landless labourers kept piggeries and left garbage around their houses. It was fed to animals by 7.16 per cent of the total households with a maximum of 11.76 per cent small farmers. Only 2.46 per cent households showed practice of burning and burying and this was more common with only households belonging to landless labourers. Sources of water supply and mode of garbage disposal among the poor households are presented in Fig. XXVI.

A deep thinking needs to be generated about the water supply and disposal of garbages among the rural poor. This could be only possible when systematic efforts are made to educate them on various aspects of advantages and disadvantages of making quick disposal of garbages.

ROLE OF WOMEN IN DECISION-MAKING:

From time immemorial man has always imposed his superiority over the woman. The modesty, tolerance and patience of women were taken otherwise and misinterpreted. However, with time, values changed and the society gave due importance and respect to the women. Now in every sphere of life - political, sociological, administrative etc. - women have started playing definite role, particularly in cities. However, it is tragic that the rural women still have the deplorable condition as the major share in making certain important and fundamental decisions goes to the man, even though they work with diligence in the house as well as in the fields. Table 2.15 reflects the role of woman in decision-making in family matters.

Table 2.15. Role of rural women of different categories in decision-making on various household issues.
(Number of households)

Particulars	SMALL FARMERS				MARGINAL FARMERS				LANDLESS LABOURERS				GRAND TOTAL			
	Male	Female	Both	Total	Male	Female	Both	Total	Male	Female	Both	Total	Male	Female	Both	Total
<u>Education</u>	104	10	22	136	174	5	39	218	79	1	13	93	357	16	74	447
(a) Boys	(75.47)	(7.35)	(16.18)	(100)	(79.82)	(2.29)	(7.89)	(100)	(84.94)	(1.08)	(13.98)	(100)	(79.86)	(3.58)	(16.56)	(100)
(b) Girls	104	10	22	136	174	5	39	218	79	1	13	93	357	16	74	447
	(75.47)	(7.35)	(16.18)	(100)	(79.82)	(2.29)	(7.89)	(100)	(84.94)	(1.08)	(13.98)	(100)	(79.86)	(3.58)	(16.54)	(100)
<u>Marriage</u>																
(a) Boys	82	10	44	136	138	8	72	218	64	1	28	93	284	19	144	447
	(60.29)	(7.36)	(32.35)	(100)	(63.30)	(3.67)	(33.03)	(100)	(68.82)	(1.08)	(30.10)	(100)	(63.53)	(4.25)	(32.22)	(100)
(b) Girls	82	10	44	136	138	8	72	218	64	1	28	93	284	19	144	447
	(60.29)	(7.36)	(32.35)	(100)	(63.30)	(3.67)	(33.03)	(100)	(68.82)	(1.08)	(30.10)	(100)	(63.53)	(4.25)	(32.22)	(100)
<u>Household expenditure</u>	89	10	37	136	152	8	58	218	73	1	19	93	314	19	114	447
	(65.44)	(7.35)	(27.21)	(100)	(69.72)	(3.61)	(26.61)	(100)	(78.49)	(1.08)	(20.43)	(100)	(70.25)	(4.25)	(25.50)	(100)
<u>Purchase of Agril. assets, machinery</u>	105	6	25	136	176	6	36	218	82	1	10	93	363	13	71	447
	(77.21)	(4.41)	(18.38)	(100)	(80.74)	(2.75)	(16.51)	(100)	(88.17)	(1.08)	(10.75)	(100)	(81.21)	(2.91)	(15.88)	(100)
<u>Loans/Borrowings</u>	105	6	25	136	173	5	40	218	82	1	10	93	360	12	75	447
	(77.21)	(4.41)	(18.38)	(100)	(79.36)	(2.29)	(18.35)	(100)	(88.17)	(1.08)	(10.75)	(100)	(80.54)	(2.68)	(16.78)	(100)
<u>Sale of assets/produce, grains, livestock, milk and milk products.</u>	105	6	25	136	173	5	40	218	82	1	10	93	360	12	75	447
	(77.21)	(4.41)	(18.38)	(100)	(79.36)	(2.29)	(18.35)	(100)	(88.17)	(1.08)	(10.75)	(100)	(80.54)	(2.68)	(16.78)	(100)

Figures in parentheses show percentage of their respective totals.

It is evident from the data given in the table that very few rural poor women played a role in decision making. Their involvement in the sale of assets and loans/borrowings was only 2.68 per cent and in the marriages and household expenditure, it was only 4.25 per cent. With regard to the education of children, they had only 3.58 per cent share in having their children educated. Only in 2.91 per cent of the total families surveyed, women took part in the decision on purchase of agricultural assets and machinery, while, on the other hand, males had the dominant role in every issue. They had their share 63.55%, 70.25%, 79.86%, 80.54%, 81.21% in making decisions in respect of marriage, household expenditure, education, loans/borrowings and sale of assets and purchase of agricultural assets, respectively. It can be easily derived that, in marriage, both male and female play their roles; the percentage found is 32.22%, while in loans/borrowings, sale of assets, purchase of agricultural assets and education, it is round-about 16%. In household expenditure, both male and female share the percentage to the tune of 25.50%. So, we can say that women play their role in settling the marriage of their children and household expenditure comparatively better, while in the purchase of agricultural assets, education of children, loans/borrowings and sale of assets, men totally out-numbered females and there is very little or negligible say of women folk.

Females belonging to small farmer's group have comparatively better say in all the listed issues against marginal farmers and landless labourers. About 7.35 per cent of the females had their share in making decisions independently about the education and marriage of their children, and in household expenditure; while in the purchase of agricultural assets, loans/borrowings and

sale of assets, it was only 4.41 per cent in case of small farmers' group. Women of marginal farmers group had very little share in making decisions independently it ranged from 2.29 per cent in education, loans/borrow and sale of assets, to 3.67 per cent in case of marriage. In the third group, independent decision was made by 1.0 per cent of the women in each issue. Viewing the pattern critically, it can be asserted that landless labourers still cling to the dogma that women should not be allowed to take independent decision but as the land grows, i.e. in case of marginal farmers and small farmers, the share of women increases in making certain decisions.

It is only the marriage of their children and household expenditure where women are consulted or they take independent decisions as compared to other issues in which their role is negligible.

Willingness of women for training

Different extension programmes like magazines, newspapers, radio etc. have enlightened the women folk and have created a good scope for different trainings, short-term courses and other medias. As mothers are the principal architects of the future generation and civilization starts from home by the sweet kisses of mother and affection of father, it is of utmost importance to impart necessary training and education to the rural women. Another important aspect which needs to be given more emphasis is the training on crafts and other trades so that the economy of the family can be sound.

In table 2.16, an attempt has been made to quantify the number of women interested in different kinds of trainings and trades. Most of the women, i.e., about 44.74 per cent, opted for cutting and tailoring and next in line was knitting which attracted as many as 17.27 per cent women; at the top of this was embroidery which had 15.51 per cent of women interested, followed by spinning and weaving in which 11.01 per cent of the women were eager to take training.

Table 2.16. Willingness of women for training in different trades.

Sr. No.	Particulars	Small Farmers	Marginal Farmers	Landless Labourers	Total
1.	Cutting and tailoring	130 (95.59)	202 (92.66)	84 (90.32)	416 (93.07)
2.	Knitting	58 (42.65)	69 (31.65)	33 (34.41)	160 (35.79)
3.	Embroidery	45 (33.09)	68 (31.19)	31 (33.33)	144 (32.21)
4.	Spinning and weaving	26 (19.12)	47 (21.56)	29 (31.18)	102 (22.82)
5.	Cane work	10 (7.35)	20 (9.17)	10 (10.75)	40 (8.95)
6.	Leather work	4 (2.94)	10 (4.59)	4 (4.30)	18 (4.03)
7.	Papier mashie	8 (5.88)	7 (3.21)	1 (1.08)	16 (3.58)
8.	Food processing	5 (3.68)	8 (3.67)	3 (3.23)	16 (3.58)
9.	Toys and doll-making	1 (0.74)	8 (3.67)	1 (1.08)	10 (2.24)
10.	Vegetable growing	-	2 (0.92)	-	2 (0.45)
11.	Dairying	1 (0.74)	-	1 (1.08)	2 (0.45)
Total		136	218	93	447

Type of help needed:

(a) Financial	102 (75.00)	164 (75.23)	86 (92.47)	352 (78.75)
(b) Technical	136 (100.00)	216 (99.08)	93 (100.00)	445 (99.55)

Figures in parentheses show the percentage of the respective total households.

ing. Very small percentage was to have training in food processing, toys and doll-making, vegetable growing, paper mache, cane work, leather work and dairying.

Most of the women belonging to small farmers group wanted training in cutting and tailoring, followed by knitting and embroidery. The percentage which opted for these was 45.18, 20.63 and 15.63 respectively, closely followed by spinning and weaving. Almost the same trend was observed in marginal farmers and landless labourers group. Landless labourer women also showed a good interest in cane work. Willingness of poor women for training in different trades is shown in Fig. XXVII. It was observed that women were reluctant to have financial help. Only 78.75 per cent of the women gave their consent for it, while almost all the women opted for technical help. In case of small farmers and landless labourers group, 100 per cent of the women wanted technical help, followed by 99.08 per cent of the marginal farmers group. On the other hand, the financial need was most felt by landless labourers group while, in small and marginal farmers group, only 75 per cent of the women wanted financial help.

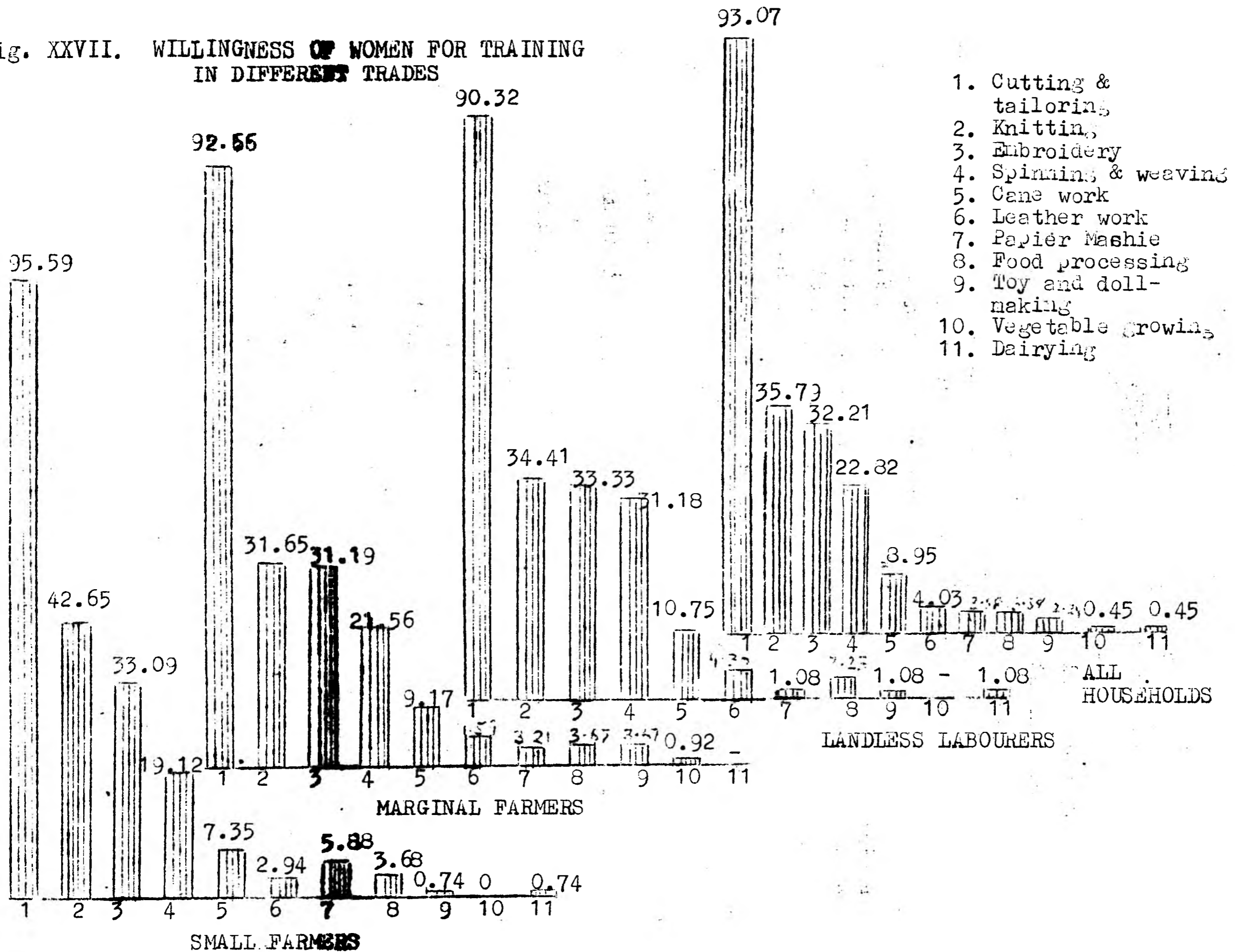
It can be asserted that most of the women wanted their trainings for cutting and tailoring, knitting, embroidery, spinning and weaving, which shows a clear tendency of women coming out of the traditional old trades of cane work etc. and they want to be technically sound as well.

CONCLUSIONS AND SUGGESTIONS

Conclusions

Indian woman is the nerve centre of the family. In the villages, the woman contributes to production by helping her husband in the fields, shapes the home and looks after the welfare of the family but, unfortunately, she is being ignored while making family decisions and is not being given due share in the household facilities and other social amenities.

Fig. XXVII. WILLINGNESS OF WOMEN FOR TRAINING IN DIFFERENT TRADES



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The present study has revealed that about 55 per cent of the families of rural poor were nuclear, even then the average size of the family was 7.6 which seems to be a larger unit due to poverty. Further, it was observed that the sex ratio of the poor population was higher, i.e., 937 females per thousand of males as against the district average of 862.

An important finding also indicated that among scheduled castes and higher castes, the nuclear families were comparatively more than the backward classes. Further, among scheduled castes disintegration of joint families into nuclear ones with the decreasing of assets was observed as more common.

Study of the composition of families of small and marginal farmers and landless labourers, according to the age of the members, showed that as the poverty of a family increased, the age of the female members decreased. Infants constituted nearly one-ninth of the total population, while children of school-going age were a little more than two-third and the population of working age-group accounted for nearly 54 per cent of the total population. With regard to literacy rate, the position worsened as the poverty increased. Scheduled castes shared only about 14 per cent of the total literates as compared to nearly 30 per cent by backward class and 56 per cent by the higher castes. Literacy among the women was rather disappointing in comparison to men. In the case of scheduled caste women, it was even worse. The level of education varied according to the social status of the people. It was more true in case of women.

Distribution of female workers according to their age-groups revealed that a little more than 30 per cent of the female work force was constituted by girls between the age of 10 to 15 years. Occupational distribution of the rural women showed that about 56 per cent of the working women were engaged in productive work other than household work. Main occupations of women were farming,

wage work, tailoring, spinning and weaving, dairying, sheep and goat rearing etc. Landless women were mainly engaged in wage work, farming, spinning and weaving, sheep and goat rearing etc., whereas majority of the women from small and marginal farmers' families were engaged in farming followed by wage work. Level of productive employment of the poor women was worked out to be as 104 days on an average. However, this level was decreasing from 111 days in case of small farmers to only 79 days for the landless women.

As far as housing and household facilities were concerned, most of the houses in this area were found to be made of mud, and only 34 per cent of the houses were pucca ones. About 70 per cent of the houses were of two to three rooms. More than 10 per cent of the total houses contained only one room. Around 29 per cent of the families had out-door kitchens only. Common cooking device in this area was earthen chulha which was used by almost all the households. Kerosene stove and tandoor were used only by a few households. Smokeless chulha, angithi and gohar gas were found totally absent. Drinking water supply and drainage systems were found adequate for about 51 and 65 per cent of the households, respectively. Most of the drains were kacha.

Methods of storing grains were mainly gunny bags followed by pitchers and kuthla/kothi. For storing cooked foods, metallic utensils, earthen pots and baskets were being used. Water for drinking purposes was mostly stored in pitchers. All these methods were not scientific and hygienic. As a result, all houses were infested with rats and mice, mosquitoes and flies. Further, lice, bed bugs, termites, cockroaches and ticks and mites were also commonly found in these houses. Main sources of water supply in the villages were tanks/ponds, canals and wells. Only a small portion of the poor population were provided with tap water and water through hand-pumps. The method of garbage disposal among these people was very unhygienic and most of the households used to throw their garbage in

open. All this points towards the surroundings and conditions within which the real workers of the rural India live and work.

Regarding the role of poor rural women in making household decisions, it was found that their say in the family affairs was decreasing with increase in the poverty of the family. Among the small farmers' households, women played a vital role as compared to marginal farmers and landless labourers. However, their maximum concern was shown with the marriage of children, followed by household expenditure, borrowings, sale of assets and produce, and the education of their children. Willingness of poor women for increasing their proficiency and skill in different trades as well as for enhancing their family earnings showed that maximum women were interested in cutting and tailoring, followed by knitting, embroidery, spinning and weaving. For improving the purchasing-power, almost all of them needed technical help and about 79 per cent required financial assistance too.

Suggestions

Through this study, it has been found that a poor woman of this area resides in a poorly built kacha house under very unhygienic conditions, having three/four minor children and shares a considerable burden of family earnings in the fields as well as within the household. But, unfortunately, due to ignorance, conservatism and unhealthy traditions, our society has ignored their contribution and the role that they can play. Still, the woman suffers from a feeling of inadequacy and, as such, she has not been able to make her right contribution. The elimination of drudgery, therefore, requires that one must think and plan out every thing de novo and try to commence in a

judicious way. Our rural women can no longer live in isolation of the past and can no longer escape the inevitable impact of the rapid changes that are taking place in the country today. The days of fine arguments are long, long past with an awakening in rural masses. This may mean that they have rejected their inferior status and strived to live under the modern socio-economic pattern of changing society.

If rural areas are to prosper, rural women should be sufficiently healthy, enthusiastic and technically sound to undertake and fulfil their responsibilities both as house-wives and as mothers. They should know how to keep their homes clean, how to bring up children and keep them healthy. They must know other trades so as to keep themselves busy in the off hours and, thus, to augment the income of the family. The programme should be such that they should bring about an overall improvement in the standard of living, thinking, earning, spending and saving. In domestic work, more effective application of labour-saving devices can create leisure hours for women, lighten their daily course and, thus, enable them to generate more income for the family. Imparting training to village women, voluntarily associating themselves with their development programmes so as to bring out potential leadership and to absorb them as extension workers in their own home surroundings can also play a vital role in improving their lot. The valuable contribution which can be made by the poor women in the economy of the family and of the community is through crafts and productive home enterprises, such as, tailoring, weaving, knitting, embroidery, food processing etc. However, programmes must be based on the availability of raw-material, market, skills and leisure time of the women. Arrangements need to be made for their on-the-spot training, supply of raw materials, modern designs and quality control, collection of finished goods and their sale and ensure that sale proceeds get into the hands of real producers. Thus, an

extra income whatsoever, will add to the domestic budgets and contribute significantly to the economic independence of the women and raise their status in the society. The training/craft centre can also be utilized as recreation centre or meeting place for women. Different programmes and cultural activities, such as, Bhajan, music, reading of newspapers, magazines etc. may be arranged. Through these centres, they may be educated on elementary health care, environmental sanitation, better nutrition, family welfare, kitchen gardening and folk dances. At the same time, they may be able to broaden their mental horizons and learn various profitable activities to supplement their family income.

If the future agrarian structure is to be strengthened and the quality of rural life is to be improved, rural women must be provided with ample opportunities and adequate infrastructural support so as to play an active role in the social, political and economic affairs of the community. Some immediate steps necessary for **uplifting** their lot are listed below:-

1. Intensive programme of educating the village girls alongwith training in crafts so as to relieve them from the bread-earning task;
2. inclusion of home science curriculum as a compulsory subject in the matriculation programmes;
3. opening of craft/training centres for adult women alongwith vigorous adult literacy drive;
4. making provision for good number of prizes, awards, stipends, scholarships and facilities like books, stationery etc. at a very nominal cost for the village girls in the schools;

5. opening of centres for supplying raw-materials, equipment, designs, technical guidance, collection of finished products and their marketing;
6. organisation of women activities on sound lines with a view to secure their participation in different development activities;
7. establishment of family welfare centres having dedicated and committed lady doctors, so as to advise the poor women on preventive measures of birth control, child welfare, family health care, nutrition and hygiene;
8. organisation of women village councils and co-operatives so as to promote rural handicrafts and have a linkage with the other community organisations run for the rural development; and
9. revival of religious festivals and cultural activities of women with a new meaning and spirit for making their lives more gay and colourful within their limited means.

III

INCOME AND EMPLOYMENT STATUS OF RURAL POOR AROUND BRUNJA

Mahatma Gandhi wanted that cities must subserve villages. In his view, exploiting of villages was itself an organised violence. He remarked that if we want 'Swaraj' to be built on non-violence, we have to give the villages their proper place. Under 'Swaraj', nobody is anybody's enemy; everybody contributes his or her duty quota to the common goal; all can read, write and their knowledge keeps growing day by day. In his view, village 'swaraj' was a complete republic, independent of its neighbours for its own vital wants (food, clothing and shelter) and, yet, inter-dependent for many others in which dependence is a necessity. What he wanted was an all-round development of the villages.

After independence, process of planning started. Many programmes for increasing agricultural and industrial production, community development and for establishing a Welfare State were launched. Based on the report of an International Team of Experts, the Government of India started Intensive Agricultural Development Programmes in 1960 with a view to supply adequate farm credit and other agricultural inputs through strengthened cooperatives for increasing agricultural production. Since then, many programmes like 'Grow More Food' Campaign, High-Yielding Varieties Programme, Green Revolution, Intensive Cattle Development Programme, Intensive Agricultural Area Programme, Small Farmers' Development Programme, Marginal Farmers and Agricultural Labourers' Development Programme, Integrated Dryland Agriculture Development Programme, Drought-Prone Area Development Programme, Intensive Cotton Development Programme, Rural Industries Project, etc. have been started.

No doubt, these programmes have made certain impact on the rural production and economy. However, all the progress has been lopsided and it is common feeling that the gaps between large and small farmers, rich and poor, rural elites and landless labourers, haves and have-nots have been widened. The population growth has counteracted the progress whatsoever achieved. Within the villages it has undoubtedly had a tendency not only to cause fragmentation of holdings but, thereby, also to fortify the class structure, to make it more rigid and less egalitarian by increasing the relative number of landless and poor, and thus ever more inimical to the success of efforts to raise productivity in agriculture. Nevertheless, the upward trend in population has meant that more food has been needed to maintain even the traditionally low levels of nutrition. More labour has to be put in by a labour force that has been growing at about the same rate as the population. Thus an inter-play between the increased needs for food, the bigger labour force and the slow improvement in techniques has resulted in an increase in the input of work to preserve traditional levels of living for the agricultural population.

However, a process of gradual adjustment has constantly given some work to almost all in the growing agricultural labour force except to those who, for social reasons, have preferred to remain idle or do little work. They have been able to indulge in that luxury at little cost. Since labour has remained very cheap, the whole social situation has, thus, been subtly arranged to absorb the continual increase in the agricultural labour force. As such, for the rural reconstruction and revitalisation of the shattered rural economy, the present Government has initiated the integrated rural development programme. The programmes are

to be tailored to the local needs and resources that are economically viable and socially acceptable. Before such programmes are formulated, it is most essential that important maladies for different target groups are identified and the gaps in the employment and income of these poor are located. So, in order to have a real assessment of the existing employment and income situation, this study has been undertaken. Specifically, the objectives of this study may be listed as follows:-

1. To identify different economic activities of different categories of rural poor;
2. to examine the extent of employment and under-employment amongst different poor groups;
3. to assess the household income of rural poor from different sources;
4. to find out the professional skill, willingness for training and assistance required by different categories; and
5. to suggest constructive programmes for increasing the employment, efficiency and earnings of different categories of rural poor.

A realistic approach to the above objectives would certainly help in developing various projects for different sets of people to augment their employment and income in the long run. Every care has to be taken to ensure that these projects are self-generating and self-propelling in nature. In this way, the disorganised rural economy can be pushed on to the take off stage and only then we would be able to have the real glory of the villages as it was in the past.

METHODOLOGY

The same cluster of 30 villages around Bhuna has been used for the purpose of this study. A list of all the small and marginal farmers and landless labourers was obtained from the Small Farmers' Development Agency operating in the district. Keeping in view the objectives of the study, 40 per cent of the small and marginal farmers and landless labourers from each village were randomly selected as respondents. Thus, 136 small farmers, 218 marginal farmers and 93 landless labourers, making a sample of 447 households were taken. Table 2.1, already given in Part-II of this Report, explains the composition of the sample. Necessary information given by the respondents was recorded on a carefully drawn and pre-tested comprehensive schedule/questionnaire.

DATA ANALYSIS AND DISCUSSION

A. Male workers' distribution according to their age-groups

Our agriculture is characterized by under-employment and disguised unemployment. Agricultural development has not been able to keep pace with the increasing work force in the rural areas and there are no side avenues for gainful employment, hence all the work force has to be absorbed in agriculture. Consequently, the labour productivity has gone down. Children are diverted from the classroom to different income-earning tasks because of economic considerations. Even then the production as well as income of a sizeable class of people has been near the subsistence level.

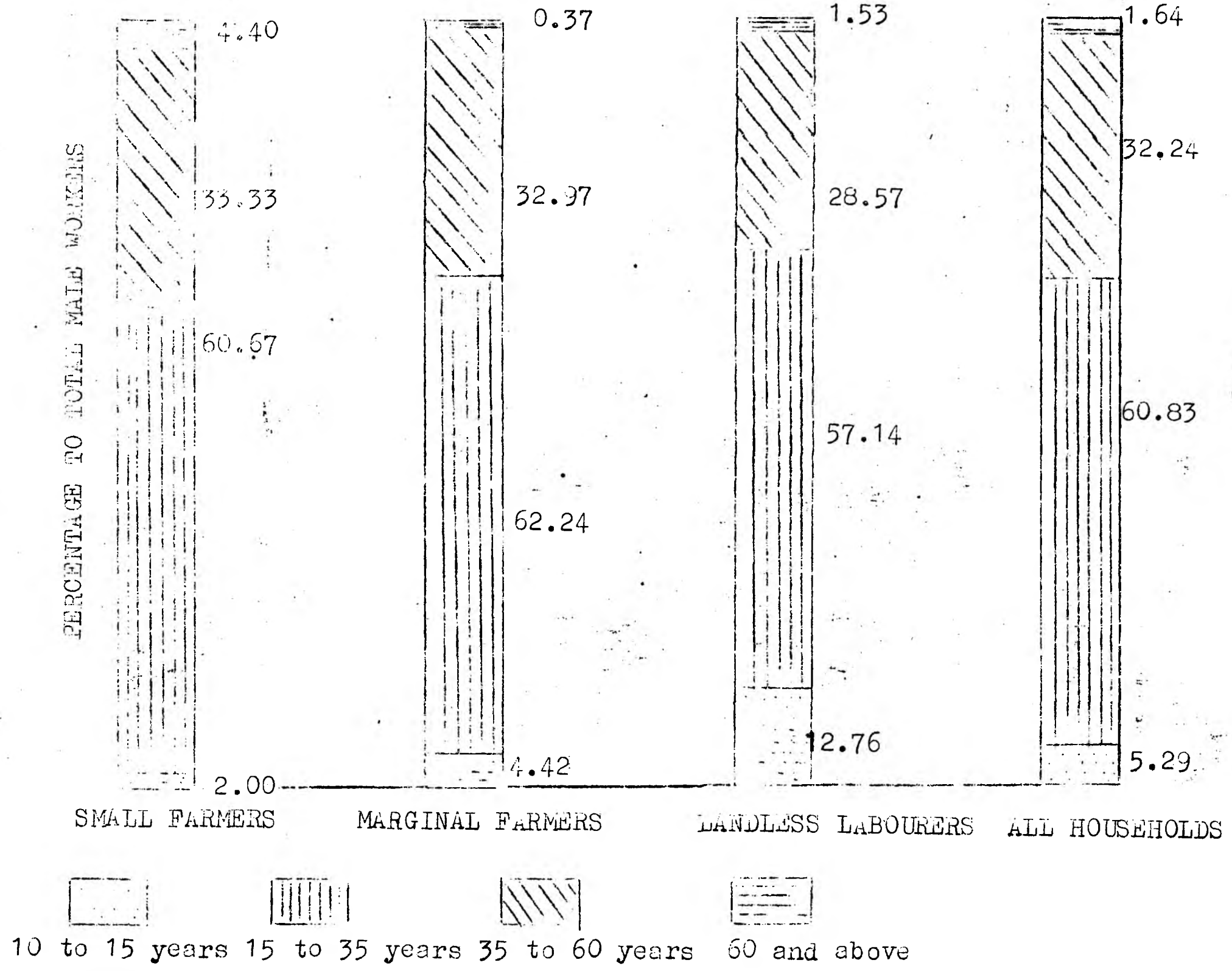
In table 3.1 an age-wise account of male workers is given. An interesting point worth noting is that a little more than 93 per cent of the total male workers were in the age-group of 15 to 60 years, out of which nearly 61 per cent belonged to youth class (15 to 35 years), as compared to about 44 per cent female youth workers. Only 5.29 per cent of the male workers were children as against 30.54 per cent female children, which reveals that female

Table 3.1 : Male workers' distribution according to different age-groups.

Age-groups	Small farmers	Marginal farmers	Landless labourers	Total
10 - 15 years	6 (2.00)	24 (4.42)	25 (12.76)	55 (5.29)
15 - 35 years	182 (60.67)	338 (62.24)	112 (57.14)	632 (60.83)
35 - 60 years	100 (33.33)	179 (32.97)	56 (28.57)	335 (32.24)
60 and above	12 (4.00)	2 (0.37)	3 (1.53)	17 (1.64)
Total	300 (100.00)	543 (100.00)	196 (100.00)	1039 (100.00)
Per household working males	2.21	2.49	2.11	2.32

Figures in parentheses show the percentage of their respective totals.

DISTRIBUTION OF MALE WORKERS INTO DIFFERENT AGE-GROUPS



children are put to manual work in larger number and they are not allowed to devote time towards their studies. Male workers above 60 years of age were only 1.64 per cent of the total male workers. On an average, male workers per household accounted for 2.3.

Looking at the picture of various age-groups of male workers in different categories of households (Fig. XXVIII), it was noticed that proportion of male children ranged from 2.00 per cent in small farmers to 12.76 per cent in case of landless labourers. This supports the hypothesis that the children are mainly withdrawn from schools due to economic considerations. The ratio of youth workers in different categories of household showed a variation from 57.14 per cent among landless labourers to 62.24 per cent among marginal farmers. However, with regard to male workers in the age-group of 35 to 60 years, there was a slightly increasing trend, i.e., from 28.57 per cent among landless labourers to 33.33 per cent among the small farmers. Male workers of the age of 60 and above did not show any trend in relation to different categories of households. An important point which may be derived from this table is that average number of male workers per household varied from 2.11 in the landless labourers to 2.49 in marginal farmers class. Small farmer households had, on an average 2.21 male workers per household.

B. Occupational distribution of rural poor

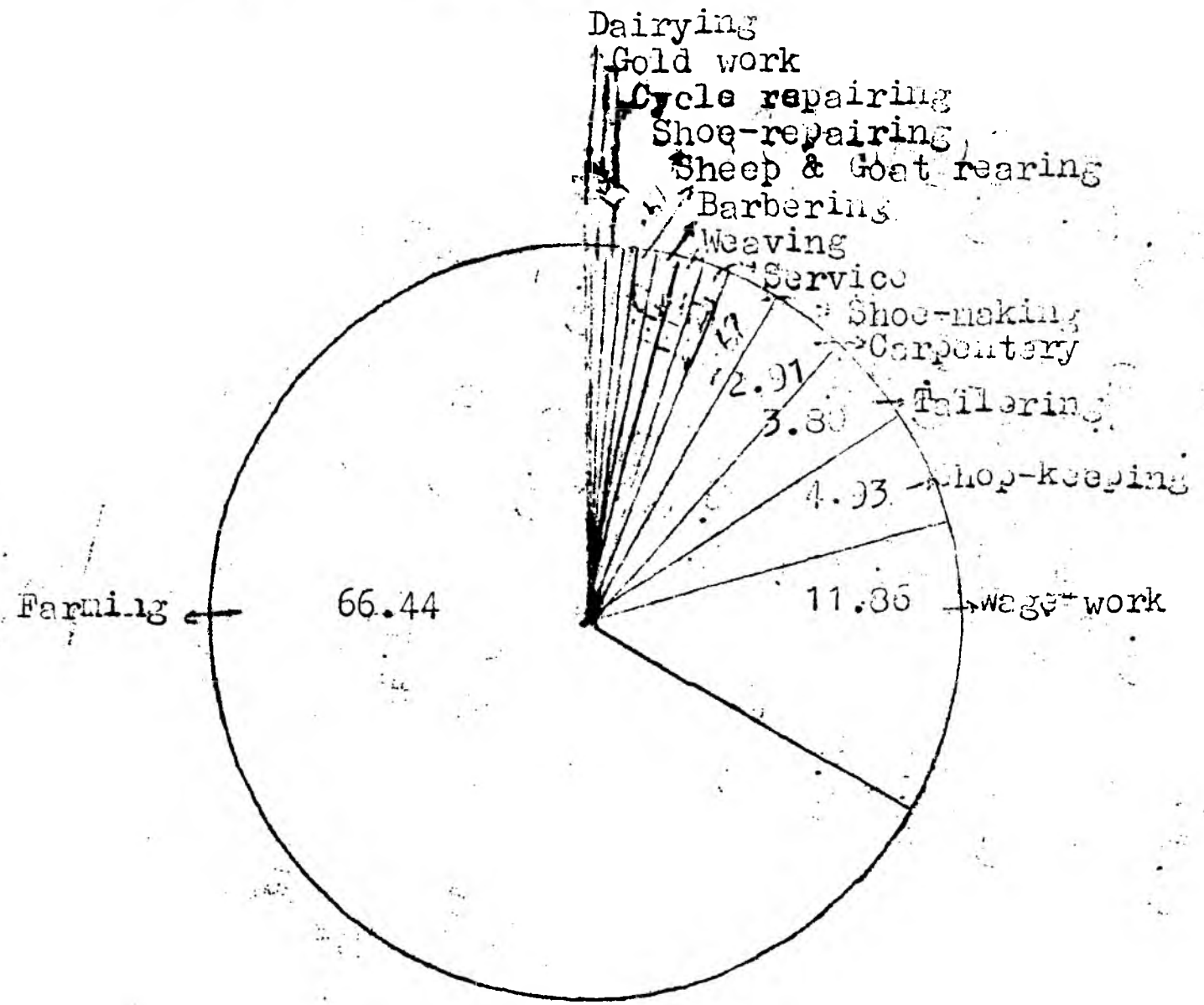
A good number of occupations including farming, wage work, shop-keeping, tailoring, carpentry, shoe-making, weaving etc. were found in this area as means of livelihood for small and marginal farmers and landless labourers. It has been reported in table 3.2 that the majority of households (66.44 per cent) had adopted farming as their mainstay of life. Main occupation for 11.86 per cent of the total households was wage work, whereas 4.93, 3.80, 2.91 and 2.68 per cent of the households were mainly engaged in shop-keeping, tailoring, carpentry and shoe-making respectively. Households belonging to small, marginal farmers and landless labourers chiefly engaged in farming were 87.50, 71.56 and 23.65 per cent, respectively.

Table 3.2 : Main occupational distribution of rural poor

Sr. No.	Occupation	Small farmers	Marginal farmers	Landless labourers	Total
1.	Farming	119 (87.50)	156 (71.56)	22 (23.65)	297 (66.44)
2.	Wage work	4 (2.95)	15 (6.88)	34 (36.55)	53 (11.86)
3.	Shop-keeping	2 (1.47)	11 (5.04)	9 (9.68)	22 (4.93)
4.	Tailoring	4 (2.95)	6 (2.76)	7 (7.52)	17 (3.80)
5.	Carpentary	1 (0.74)	8 (3.66)	4 (4.28)	13 (2.91)
6.	Shoe-making	1 (0.73)	2 (0.92)	9 (9.68)	12 (2.68)
7.	Service	2 (1.47)	6 (2.76)	2 (2.16)	10 (2.24)
8.	Weaving	-	4 (1.83)	1 (1.08)	5 (1.12)
9.	Barbering/ Hair-dressing	-	5 (2.29)	-	5 (1.12)
10.	Sheep and goat rearing	1 (0.73)	1 (0.46)	2 (2.16)	4 (0.89)
11.	Shoe-repairing	1 (0.73)	2 (0.92)	-	3 (0.67)
12.	Cycle repairing	-	1 (0.46)	2 (2.16)	3 (0.67)
13.	Goldsmithy	1 (0.73)	1 (0.46)	-	2 (0.45)
14.	Dairying	-	-	1 (1.08)	1 (0.22)
Total		136 (100.00)	218 (100.00)	93 (100.00)	447 (100.00)

Figures in parentheses show the percentage of their respective totals.

Fig. XXIX. OCCUPATIONAL DISTRIBUTION OF RURAL POOR
 (Percentage of households having main occupation)



On the contrary, wage work, shop-keeping, tailoring, carpentary and shoe-making were adopted by larger number of landless households as compared to small and marginal farmers. Other occupations, such as, sheep and goat rearing, weaving, shoe repairing, goldsmithy, dairying, cycle repairing, hair-dressing and services were adopted by a few households in different categories. Fig. XXIX shows the occupational distribution of rural poor with regard to their main occupation.

Subsidiary occupations adopted by different groups of people in this area were mainly farming, wage-work, dairying, service, tailoring, shoe-making, sheep and goat rearing, dyeing and hair-dressing which are shown in table 3.3. In all, about 64 per cent of the households were having subsidiary occupations. However, farming (share cropping) in case of landless labourers was the main subsidiary occupation to supplement the family income. Other subsidiary occupations in order of their adoption were wage work, dairying, service, tailoring, shoe-making, sheep and goat rearing, dyeing, hair-dressing, shop-keeping, flour milling, carpentary, embroidery, weaving, goldsmithy, shoe-repairing and band mastering. Dairying, as a subsidiary occupation, had been adopted increasingly by marginal and small farmers as compared to landless labourers. On the other hand, in wage work, largest number of landless labourers were engaged. Other occupations adopted by different categories of households showed no definite relationship with any category.

C. Employment level of male and female workers

Though there are many factors like number and efficiency of workers, type of occupation etc. which affect the household earnings but the level of employment directly influences the family income. Data given

Table 3.3 : Subsidiary occupational distribution of rural poor.

Sr. No.	Occupation	Small farmers	Marginal farmers	Landless labourers	Total
1.	Farming	17 (26.15)	62 (49.22)	6 (16.22)	85 (37.28)
2.	Wage-work	8 (12.30)	17 (13.49)	17 (45.96)	42 (18.41)
3.	Dairying	15 (23.04)	12 (9.53)	2 (5.40)	29 (12.71)
4.	Service	6 (9.23)	12 (9.53)	2 (5.40)	20 (8.77)
5.	Tailoring	5 (7.69)	3 (2.38)	2 (5.40)	10 (4.39)
6.	Shoe-making	1 (1.54)	9 (7.14)	-	10 (4.39)
7.	Sheep and goat rearing	3 (4.61)	2 (1.59)	2 (5.40)	7 (3.07)
8.	Dyeing	-	2 (1.59)	4 (10.82)	6 (2.63)
9.	Hair-dressing	2 (3.08)	1 (0.79)	1 (2.70)	4 (1.75)
10.	Shop-keeping	1 (1.54)	1 (0.79)	1 (2.70)	3 (1.32)
11.	Flour mill	2 (3.08)	1 (0.79)	-	3 (1.32)
12.	Carpentry	2 (3.08)	1 (0.79)	-	3 (1.32)
13.	Embroidery	1 (1.54)	1 (0.79)	-	2 (0.88)
14.	Weaving	1 (1.54)	-	-	1 (0.44)
15.	Gold work	1 (1.54)	-	-	1 (0.44)
16.	Shoe-repairing	-	1 (0.79)	-	1 (0.44)
17.	Band Mastering	-	1 (0.79)	-	1 (0.44)
Total		65 (100.00)	126 (100.00)	37 (100.00)	228 (100.00)

Figures in parentheses show the percentage of their respective totals.

Table 3.4 : Employment level of male and female workers

Sr. No.	Particulars	Small farmers	Marginal farmers	Landless labourers	Total
1.	Total number of days employed (Male)	69325	138585	52555	260465
2.	Total number of workers (Male)	300	543	196	1039
3.	Average working days (Male)	231	255	268	251
4.	Total number of days employed (Female)	27840	35128	10465	73433
5.	Total number of workers (Female)	250	323	132	705
6.	Average working days (Female)	111	109	79	104
7.	Total number of days employed (Male and Female)	97165	173713	63020	333898
8.	Total number of workers (Male and Female)	550	866	328	1744
9.	Average working days (Male and Female)	177	201	192	191

in table 3.4 reveal that, on an average, a worker gets employment for 191 days in a year, which is evidently an under-utilization of human resources. Another characteristic of this employment was its seasonal nature because in slack seasons, there was not enough job for them, particularly for landless labourers. About the levels of employment of male and female workers, the position was examined separately. The condition was more disappointing as, on an average, a female worker could get employment for only 104 days in a year against 251 days for male labourer.

The level of employment of male worker among different categories of households has, however, been increasing as the economic status decreased. Thus, a male worker from small farmer households got an employment for 231 days as compared to a male worker from marginal farmer households for 255 days and that from a landless labourer household for 268 days in a year. In case of women workers, the trend was reverse, ranging from 79 days in case of landless female workers to 111 days for a woman worker belonging to small farmers household. When the days of employment of male and female workers were taken together, the maximum employment was obtained by a worker of marginal farmer's family (201 days) and the minimum (177 days) by a worker from small farmers household.

D. Family income

In spite of over saturation in agriculture and stagnation in secondary and tertiary occupations, agriculture still continues to be the mainstay of life of the rural poor. This fact has been confirmed by table 3.5 as nearly 49 per cent of total family income was derived from farming. Dairying contributed about 22 per cent to the total family income followed by wage-work contributing 16 per cent, 4.72 per cent by business and shop-keeping, 3.51 per cent by service and 1.85 per cent by

Table 3.5 : Income from different occupations among different categories of rural poor.

Sr. No.	Occupations	Income			
		Small farmers (Rs.)	Marginal farmers (Rs.)	Landless labourers (Rs.)	All categories (Rs.)
1.	Farming	5,46,603 (72.35)	4,35,841 (42.54)	73,152 (19.16)	10,55,596 (48.83)
2.	Dairying	1,29,054 (17.08)	3,25,100 (31.73)	33,778 (8.85)	4,87,932 (22.56)
3.	Wage work	12,640 (1.67)	1,18,320 (11.55)	2,13,985 (56.03)	3,44,945 (15.96)
4.	Business and Shop-keeping	10,630 (1.41)	59,320 (5.79)	32,130 (8.41)	1,02,080 (4.72)
5.	Service	22,184 (2.94)	42,060 (4.11)	11,740 (3.07)	75,980 (3.51)
6.	Shoe-making/leather work	1,500 (0.20)	31,300 (3.05)	7,200 (1.89)	40,000 (1.85)
7.	Tailoring	7,610 (1.01)	2,100 (0.20)	6,300 (1.65)	16,010 (0.74)
8.	Sheep and goat rearing	12,000 (1.59)	1,000 (0.09)	800 (0.21)	13,800 (0.64)
9.	Others (Pottery Piggery etc.)	4,000 (0.53)	2,500 (0.24)	1,000 (0.26)	7,500 (0.35)
10.	Carpentry	2,300 (0.30)	1,800 (0.18)	1,000 (0.26)	5,100 (0.24)
11.	Flour milling	3,000 (0.39)	1,500 (0.15)	-	4,500 (0.21)
12.	Hair-dressing	1,550 (0.21)	2,148 (0.21)	800 (0.21)	4,498 (0.21)
13.	Gold work	2,400 (0.32)	1,600 (0.16)	-	4,000 (0.18)
Total		7,55,467 (100.00)	10,24,589 (100.00)	3,81,885 (100.00)	21,61,941 (100.00)
<u>Income Per Capita</u>					
(a)	Annual	714.73	606.98	578.61	634.93
(b)	Monthly	59.56	50.58	48.22	52.92

Figures in parentheses show the percentage of their respective totals.

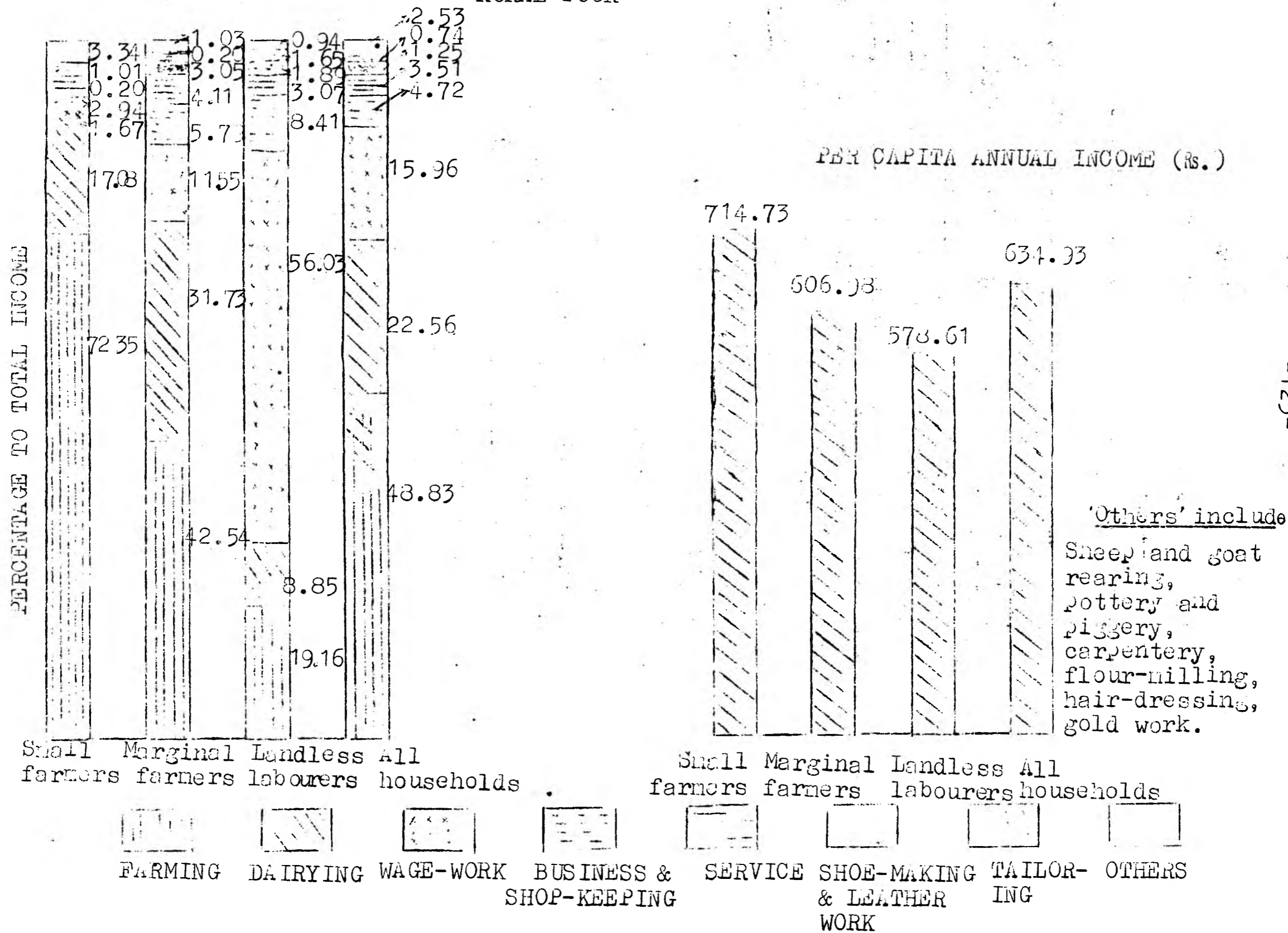
shoe-making and leather work. Contribution of occupations like tailoring, sheep and goat rearing, carpentry, pottery, piggery etc. has been very little.

Among the small farmers, a little more than 72 per cent of the total income was obtained from the farming and around 17 per cent from dairying. In case of marginal farmers, contribution of farming, dairying, wage work, business and service was 42.54, 31.73, 11.55, 5.79 and 4.11 per cent, respectively. Among the landless labourer families, 56.03 per cent of the total income was obtained from wage-work, whereas farming and dairying supported upto 19.16 and 8.85 per cent of the total income, respectively. Thus, it may be observed that in all the three categories of household farming, dairying and wage work together contributed from 82 to 86 per cent of the total family income. This indicates that secondary and tertiary sectors of economy need to be developed to mitigate the excess burden of population on agriculture and improve the purchasing power of the rural poor.

Further, it was observed that, on an average, the per capita income among these households worked out to about 635 rupees per annum. Per capita average monthly income was calculated to be Rs.52.92. The per capita income among different categories of households showed a range from Rs.578.61 for landless to Rs.14,73 per year for the small farmer households (see Fig. XXX). Thus, an increasing trend was observed, with an increase in assets of the households. The per capita monthly income for small and marginal farmers and landless labourers was calculated as Rs.59.56, 50.58 and Rs.48.22, respectively. For a comparative study, it is worthwhile to mention here that the per capita income of the Haryana State during 1973-74 was Rs.1186/-. It means that there has been a big gap between the economic condition of the rural poor and the average per capita income of the State. This gap can only be bridged by creating additional employment opportunities through subsidiary occupations other than farming (agriculture).

Fig. XXX.

INCOME FROM DIFFERENT OCCUPATIONS AMONG DIFFERENT CATEGORIES OF RURAL POOR



E. Willingness for occupational training and assistance required by the rural poor.

Under the existing economy of the area which may be called as fast developing one, the rural poor have also developed a consciousness and are keenly interested in increasing their employment and income as well. This can be seen from table 3.6. As much as 67.56 per cent of the total households showed their willingness for training in dairying followed by general mechanics; tractor operation, repairs and maintenance, weaving, tailoring, sheep and goat rearing, leather work, carpentry etc. For comparative details, see Fig. XXXI also.

Among the small and marginal farmers, the order of preference was almost the same. However, most of the landless labourers showed their priorities for training in dairying followed by tailoring, mechanics, sheep and goat rearing, carpentry, tractor operation, repairs and maintenance, leather works, weaving and piggery. One thing was observed that willingness of different categories of rural poor was least for training in poultry and piggery. This may be attributed to the difficulties in marketing of produce, high cost of feeds, greater risk of enterprise and social orthodoxy.

During the survey, questions were also put to the rural poor regarding the type of assistance - financial, technical and marketing, required by different categories of households for improving their employment and income positions. About 64 per cent of the total households sought for financial, 61.52 per cent technical and 51.90 per cent for marketing assistance. An important point which deserves special mention here was that the financial assistance was required by greater number of small farmers as compared to marginal farmers and landless labourers. On the contrary, the technical assistance was sought for propo:

Table 3.6 : Willingness of rural poor for occupational trainings and assistance required by them for the same

Sr. No.	Occupation	Small farmers	Marginal farmers	Landless labourers	Total
A. TRAININGS					
1.	Dairying	125 (91.91)	130 (59.63)	47 (50.54)	302 (67.56)
2.	Tractor operation, repair and maintenance	30 (22.06)	47 (21.56)	11 (11.83)	88 (19.69)
3.	General Mechanics	37 (27.21)	61 (27.98)	15 (16.13)	113 (25.28)
4.	Weaving	27 (19.85)	35 (16.06)	5 (5.38)	67 (14.99)
5.	Tailoring	7 (5.15)	9 (4.13)	21 (22.58)	37 (8.28)
6.	Sheep and goat rearing	4 (2.94)	8 (3.67)	14 (15.05)	26 (5.82)
7.	Leather work	2 (1.47)	7 (3.21)	10 (10.75)	19 (4.25)
8.	Carpentry	2 (1.47)	-	12 (12.90)	14 (3.13)
9.	Poultry	3 (2.21)	-	-	3 (0.67)
10.	Piggery	-	-	3 (3.23)	3 (0.67)
11.	Improved agricultural technology	1 (0.74)	2 (0.92)	-	3 (0.67)
Total		136	218	93	447
B. TYPE OF ASSISTANCE REQUIRED					
1.	Financial	89 (65.44)	138 (63.30)	61 (59.59)	288 (64.42)
2.	Technical	81 (59.56)	112 (51.38)	73 (78.49)	275 (61.52)
3.	Marketing	109 (80.15)	78 (35.78)	45 (48.39)	232 (51.90)
Total		136	218	93	447

Figures in parentheses show the percentage of their respective total households.

Fig. XI. WILLINGNESS FOR OCCUPATIONAL TRAINING

(Percentage of households' willingness)

1. Dairying
2. General Mechanics
3. Tractor operation, repairs and maintenance
4. Weaving
5. Tailoring
6. Sheep and Goat rearing
7. Leather work
8. Carpentry
9. Poultry
10. Piggery
11. Improved agricultural technology.

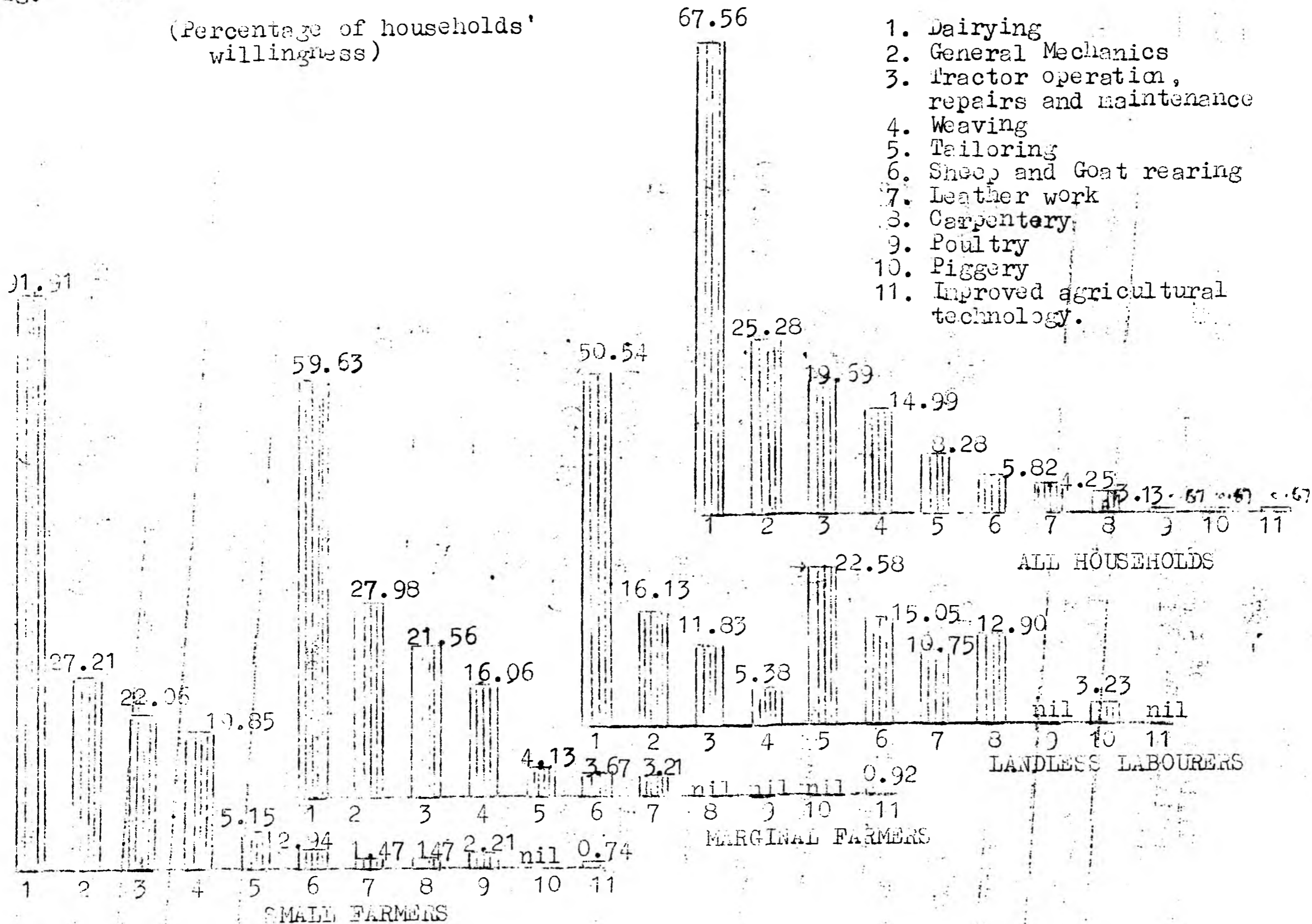
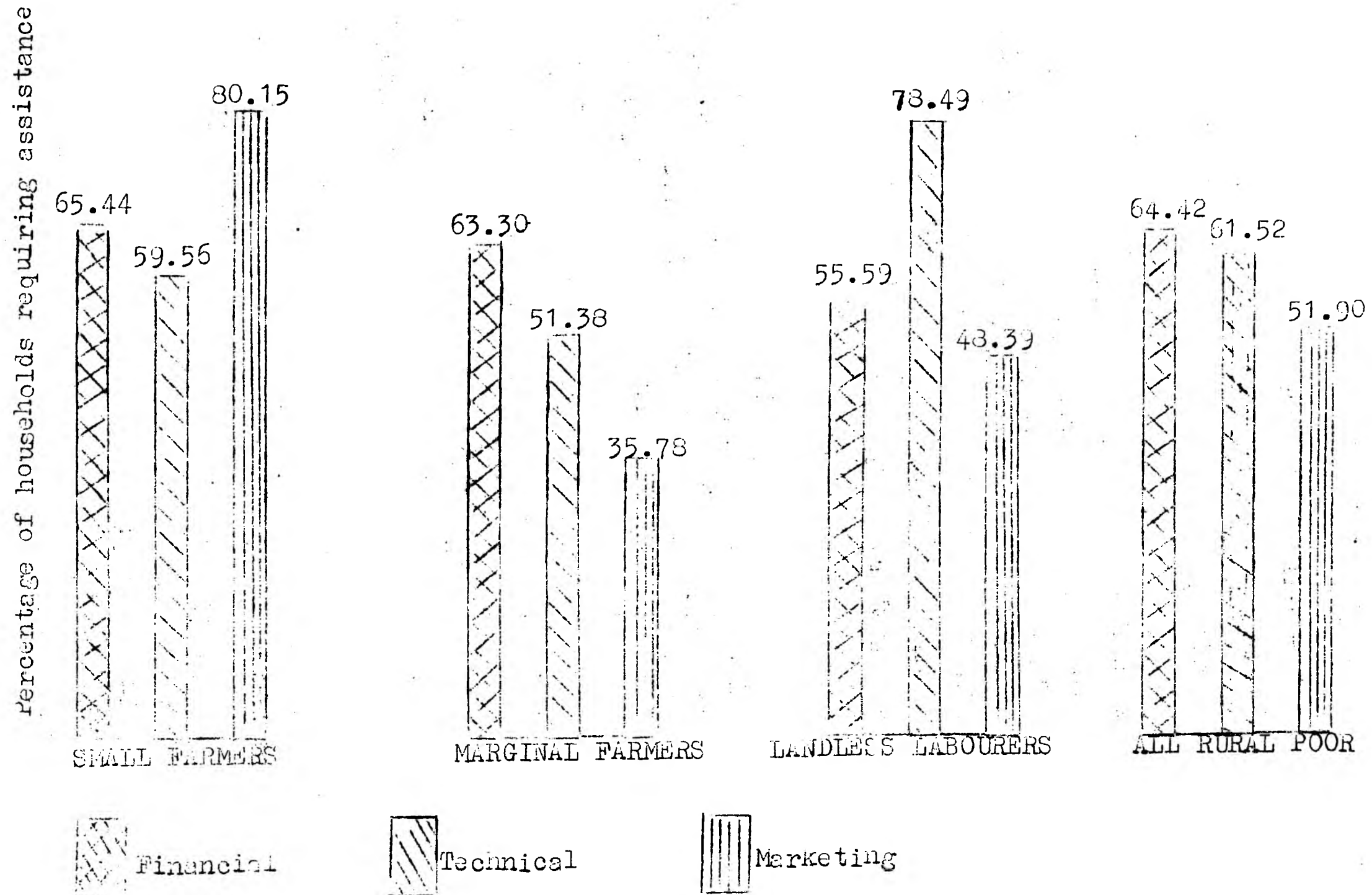


Fig. XXXII.

TYPE OF ASSISTANCE REQUIRED BY RURAL POOR



tionately more by the landless labourers in comparison to small and marginal farmers. With regard to marketing assistance, about 80 per cent of small farmers looked for it as against about 36 and 48 per cent of marginal farmers and landless labourers, respectively. Details can be seen in Fig. XXXII.

CONCLUSIONS AND SUGGESTIONS

Human welfare depends on many different goods and services. However, the most central and relevant items are the employment and income; as such, in our study, we have tried to find out the level of income and employment of the rural poor. Further, an attempt was made to record their willingness for training in different trades with a sole objective of increasing their employment as well as income. In achieving this goal, their requirements for different types of assistance were also gathered. The main conclusions of the study are summarised as follows:-

On an average, the number of male workers per family for the poor households came to 2.32, being the lowest (2.11) in the landless families and the highest (2.49) among the marginal farmer families. Almost 93 per cent of the total male workers were in 15 to 60 years' age-group. Unlike the female workers, only about 5 per cent of the total male workers were between 10 to 15 years of age. Further, it was observed that exploitation of male children as labour was more among landless labourers and it decreased among the marginal and small farmers. Working roles above 60 years of age were found very few. It indicated that either there was lack of employment opportunities or their efficiency did not permit them to obtain gainful employment.

Looking into the occupational pattern of the poor households, a good number had farming, wage work, shop-keeping, tailoring, carpentry, shoe-making, weaving etc., as their main occupations. However, farming and wage work occupied the major places. Among small and marginal farmers farming was the main occupation in respect of 87.50 and 71

per cent of the households, respectively; whereas, in case of landless labourers, wage work occupied the first place, followed by farming - a share cropping. While examining the subsidiary occupations, it was revealed that about 51 per cent of the households used to earn their livelihood by one or the other subsidiary occupation. Among different categories, this relevance was about 48, 58 and 40 per cent in case of small, marginal farmers and landless labourers, respectively. The number of subsidiary occupations decreased with the decreasing assets. This was mainly because of the limited capital assets and resources in the hands of the poor. The important subsidiary occupations, according to the extent of adoption, were farming wage work, dairying, service, tailoring, shoe-making, sheep and goat rearing, hair-dressing and so on.

On an average, a male worker was employed for 251 days in a year. The level of employment increased from 231 days among small farmers to 268 days among the landless labourers, but in case of female workers, the trend was reverse showing 79 days among landless labourers and 111 days in case of small farmers. The overall level of employment among marginal and small farmers was found to be 201 and 177 days per worker as the highest and the lowest respectively.

The per capita annual income of the three categories of rural poor was about Rs.635 as against Rs.1186 for whole of the Haryana State. It showed a big gap and it is envisaged that, through the Integrated Rural Development Programme, it would be narrowed. For different categories of households, the per capita income varied from Rs.578.61 among landless labourers to Rs.714.73 in respect of small farmers.

For increasing the professional skill and productivity, people showed their keenness for obtaining training in dairying, general mechanics, tractor operation, repairs and maintenance, weaving, tailoring, sheep and goat rearing, leather work, carpentry etc. The order of preference for training among small and marginal farmers was observed to be almost the same, but in case of landless

labourers, maximum willingness was observed for training in dairying, followed by tailoring, general mechanics, sheep and goat rearing, carpentry, tractor operation, repairs and maintenance, leather work, weaving etc.

With regard to the type of assistance required for increasing the employment and earnings, about 64 per cent of the total poor households asked for financial assistance, whereas, technical and marketing assistance was sought by about 62 and 52 per cent of the total households, respectively. An interesting point noticed was that the proportionate number of households seeking financial help increased with the increasing economic status of the households. This may be due to comparatively greater risk bearing capacity of small and marginal farmers and reluctance of the landless labourers. Regarding technical assistance, the landless labourers showed their maximum willingness as compared to small and marginal farmers.

Suggestions

Based on these surveys, the following suggestions are listed for improving the employment and purchasing power of the rural poor:-

1. In order to allow the children of rural poor, particularly of labourer class, to get education and divert them to learning centres, some incentives should be extended and special programmes designed to meet their needs. Some side avenues should also be provided at the schools through training in different crafts. This will not only help them to supplement their family income, but will also help in making a sound career and developing self-confidence in them. Moreover, they will also be able to develop specialization in a particular trade from the childhood itself.

2. For old-age workers, who are less efficient in their productivity and are unable to obtain suitable wage-work, some easy and home-based work like spinning, rope-making, tailoring etc. may be arranged.
3. For lessening the burden of population on agriculture, subsidiary occupations like tailoring, weaving, quality shoe-making, dairying, sheep and goat rearing, knitting and hosiery work may be introduced. However, a strong support through integrated programme of training, supply of credit, good animals, quality raw-material and on-the-spot technical guidance for quality control, collection and marketing of products need to be provided.
4. For increasing the strength of the small producers, they need to be organised professionally on cooperative lines at least for the purchase of raw-material, equipment and sale of their products. In the long run, this will help them to become self-reliant and self-generating.
5. Small and marginal farmers may be trained on intensive agriculture through proper crop rotation, scientific soil and water management so that they can increase their employment and income per unit of area.
6. For both the small and marginal farmers, dairying has a good scope for improving the employment and income. Besides, on account of the agro-climatic conditions of the area being favourable, the developmental potentialities are also good. A good number of livestock institutions and artificial insemination facilities and milk chilling centres are within the reach of these farmers.

7. For the revival of rural artisans, they are to be given up-to-date training in their respective trades, supplied with adequate credit, modern tools and required raw-materials, work shed facilities and marketing support. For all this, a single agency approach will be more fruitful.
8. Use of modern agricultural implements and machines is increasing day by day. Some of the implements like seed-cum-fertilizer drills, spray pumps and threshers have a great bearing on the agricultural production, but these cannot be owned by small and marginal farmers. Educated rural youth may be trained in the operation, repairs and maintenance of different implements and machines and assisted in opening rural service centres through liberal credit and technical guidance.
9. Cotton is an important crop of this region. Haryana Khadi and Handloom is famous throughout the country. Poor persons, particularly the landless labourers, may be trained in this trade and helped in establishing their own small units by providing financial, technical and marketing assistance by a single institution. It will cultivate self-confidence and sense of belongingness in them, besides improving their employment and income.

APPENDIX - A.

INTEGRATED RURAL DEVELOPMENT PROJECT- HISSAR

PROFORMA FOR VILLAGE DATA (TO BE FILLED UP IN DUPLICATE)

(information to be collected from Patwari, Gram Sechiv, Agricultural Inspector, Block Development and Panchayat Officer, etc.)

Date of beginning of survey:

Date of completing the survey:

Name of the Investigator:

Common problems of the village

Related with:

1. Employment
2. Education
3. Health
4. Credit
5. Irrigation
6. Production
7. Inputs availability
8. Transport
9. Marketing
10. Others.

General Information

1. Name of the village:
2. Location and direction:
 - b) Road on which situated.
 - b) Distance from the District H.Q.
3. Block.....Distance.....
4. Post Office.....Distance.....
5. Tahsil.....Distance.....
6. District.....
7. Mode of conveyance to reach the village.
8. Nearest Railway Station.....Distance.....
9. Nearest Bus Stop.....Distance.....

Specific Information

10. Total number of households.
11. Population:
 - a) Male(above 18 years of age) _____
 - b) Female(above 18 years of age) _____
 - c) Children (below 18 years of age) _____
 - d) Total population _____
 - e) Literate male (above 18 years of age) _____
 - f) Literate female (above 18 years of age) _____
 - g) Total literate (above 18 years of age) _____
 - h) Literate children (below 18 years of age) _____

12. Occupational Distribution:

Particulars	Number		Problems faced by each category.
	Employed Fully	Employed partially Un-employed	
a) Cultivators			
b) Landless labourers			
c) Carpenters			
d) Blacksmiths			
e) Weavers			
f) Barbers			
g) Traders and merchants			
h) Tailors			
i) Others			
i)			
ii)			
iii)			

13. Educational facilities:

Particulars	Location	No. of students		Reasons for not going to the school
		Boys	Girls	
a) Primary School				
b) Middle School				
c) High School				
d) College				
e) Training Centre				
f) Others				

14. Village institutions:

Particulars	Number	Membership	Problems in functioning
b) Cooperative Society			
c) Youth Club			
d) Others			
i)			
ii)			
iii)			

15. Drinking water facility and problems, if any.

16. Medical facilities:

Particulars	Location/ distance	Is it necessary for the village?	Problems faced by the villagers.
a) Primary Health Centre			
b) Veterinary Hospital			
c) Artificial Insemination Centre.			
d) Others.			

17. Details of credit and banking facilities:

Particulars	Location/ distance	No. of people financed	Does it meet the require- ment of the vil- lage? Yes/no	Type of people being finan- ced.	Other probl- ems faced by the vill- gers.
a) Primary coop- erative Credit Society.					
b) Central Coop- erative Bank.					
c) Land Develop- ment Bank.					
d) Commercial Banks.					
i)					
ii)					
iii)					

18. Details of size of holdings:

Size-group	No. of households	Pair of bullocks/ he-buffaloes	No. of milch cattle
Landless labour- ers up to 1.00ha.			
1.00 - 2.00			
2.00 - 4.00			
4.00 - 6.00			

Details of Source of Irrigation:

Source	Command area in hectares	Why some farmers keep the land fallow?	Size of land of the farmers keeping the Land fallow.	Problems faced by the villagers.
--------	--------------------------	--	--	----------------------------------

- Canal
- Tubewell
- Pumping set
- Others (Specify)

- a)
- b)
- c)

Land Utilization Pattern:

Particulars	Area in hectare.	Percentage.
a) Total area of the village		
i) Irrigated		
ii) Unirrigated		
b) Barren and culturable waste		
c) Fallow land		
d) Net area sown		
i) Irrigated		
ii) Unirrigated		
e) Area sown more than once		
f) Total cultivated area (d + e)		
g) Area under forest		
h) Miscellaneous		
i) Cropping Intensity		

21. Cropping pattern:

Crop	Area under improved variety (hect.)	Area under local variety (hect.)	Total area (hect.)	Irrigated area (Hect.)	Un-irrigated area (hect.)	Production (Q)	Consumption (Q)	Marketable surplus (Q)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

- A. Khريف
- i) Bajra
 - ii) Rice
 - iii) Maize
 - iv) Jowar (Fodder)
 - v) Cotton
 - vi) Sugar-cane
 - vii) Oil-seeds (specify)
 - viii) Other Khريف crops (specify)

- a)
- b)
- c)

B. Rabi

- i) Wheat
- ii) Barley
- iii) Gram
- iv) Mustard
- v) Rapeseed
- vi) Toria
- vii) Raya
- viii) Pulses (specify)

- a)
- b)
- c)

ix) Ber-
seem
x) Oats

xi) Lucern

ii) Any
other
fodder
crop
(specify)

- (a)
- (b)
- (c)

D. Vegetables
(Specify)

i) Kharif

- a)
- b)
- c)
- d)
- e)
- f)

ii) Rabi

- a)
- b)
- c)
- d)
- e)
- f)

iii) Summer

- a)
- b)
- c)
- d)
- e)
- f)

. Orchards
(Specify)

- a)
- b)
- c)
- d)
- e)

22. Marketing:

Item	Total production in the village (Q)	Total consumption (Q)	Market surplus (q)	Name of Market place	Distance from the village (km.)	How they market their produce?	Problem faced by the villagers in marketing their produce
------	--	--------------------------	-----------------------	----------------------	------------------------------------	--------------------------------	---

6

- a) Vegetable.
- b) Milk and Milk products
- c) Poultry and poultry products.
- d) Foodgrains and other farm commodities.

23. Use of Agricultural Chemicals:

Item	Quantity	Area in hectares	Problems faced regarding high prices, adulteration, timely availability and response of fertilizers' use out-dated pesticides.	Farmers' opinion about fertilizers' use.
(1)	(2)	(3)	(4)	(5)

A. Fertilizers

- a) Nitrogenous
 - i)
 - ii)
 - iii)
 - iv)
- b) Phosphatic
 - i)
 - ii)
 - iii)
- c) Potassic
 - i)
 - ii)
 - iii)

..... (2) (3) (4) (5)

Insecticides/
pesticides:

- a)
- b)
- c)
- d)
- e)
- f)
- g)
- h)

Weedicides:

- a)
- b)
- c)
- d)
- e)

Livestock and Poultry Population:

Species	No. of Animals breedwise.					
A. Cattle	Common diseases	Haryana Jersey cross-breeds.	Friesian cross-breeds	Non-descript local	Others	Problems faced by the owners.

- Female:
- Milch cows
 - Dry cows
 - Pregnant cows
 - Heifers (-2 1/2 yrs.)
 - Young calves (-12 months)
- Male:
- Old bulls
 - Young bulls (-2 yrs.)
 - Blocks

(x)

B. <u>Buffaloes</u>	Common diseases	Murrah	Non-descript	Others	Problems faced by the owners
---------------------	-----------------	--------	--------------	--------	------------------------------

Female

Milch buffaloes

Dry buffaloes

Pregnant buffaloes

Heifers(1-3 yrs.)

Young calves
(0-12 months)Male:

Stud bulls

Young bulls(1-2½yrs.)

C. <u>Goats</u>	Common diseases	Beetal	Jumna- pari	Bar- bari	Exotic cross- breeds	Non- des- cript	Prob- lems faced by the owners
-----------------	-----------------	--------	----------------	--------------	----------------------------	-----------------------	--

Female:

Milch goats

Dry goats

Pregnant goats

Young ones
(6-12 months)Young kids
(0-6 months)Male:

Breeding bucks

Young goats
(6-12 months)Young kids
(0-6 months)Animals sold for
slaughter per year

D. <u>Sheep</u>	Common diseases	Nali	Non- des- cript	Hissar dale cross- breeds	Correidale cross- breeds	Other cross- breeds	Prob- lems faced by the owners
-----------------	-----------------	------	-----------------------	------------------------------------	--------------------------------	---------------------------	--

Female:

Lambd ewes

Dry ewes

Ewe lambs (6-12 months)

Lambs (0-6 months)

Male:

Stud rams

Ram Lambs(6-12 months)

Lambs (0-6 months)

<u>Camels:</u>	Common diseases	Single humped	Double humped	Others	Number of camels used for ploughing and transport.	Problems faced by the owners.
----------------	-----------------	---------------	---------------	--------	--	-------------------------------

Mile:

Unshorn
 1-camel

1-year she-
 mel

Young-ones
 (-2 yrs.)

Young ones
 (-12 months)

Mile:

1-year camel

Young-ones
 (-2 yrs)

Young-ones
 (0-12 months)

Donkeys	Common diseases	Local	Exotic cross bred	Number of donkeys used for transport	Problems faced by the owners.
---------	-----------------	-------	-------------------	--------------------------------------	-------------------------------

Females:

Loaded donkey
 mares.

Dry donkey mares

Young-ones
 (6-12 months)

Young ones
 (0-6 months)

Males

Stallion

Young-ones
 (6-12 months)

Young ones
 (0-6 months)

C. Pigs.	Common diseases	Local	Yorkshire	Polan chine	Cross breeds	Consumption in the village (number)	Produce of the own
----------	-----------------	-------	-----------	-------------	--------------	-------------------------------------	--------------------

Females:

Farrowed sows

young sows
(6-12 months)Piglings
(0-6 months)Sold for
slaughterMale:

Stud boars

Young boars.
(6-12 months)Young boars
(0-6 months)

H. Poultry:	Common diseases	Local (desi)	Improved breeds	Ducks	Turkeys	Consumption in the village (number)	Produce of the own
-------------	-----------------	--------------	-----------------	-------	---------	-------------------------------------	--------------------

Layers

Broilers.

25. FEEDS AND FODDERS USED FOR LIVESTOCK:

(xiii)

Items	Problems of production/availability	Problems of consumption	Problems of disposal.
1	2	3	4
<u>Concentrates</u>			
Maize			
Barley			
Guar			
Gram			
Bajra			
Cotton seed			

Others:

- a)
- b)
- c)
- d)
- e)

By-product:

- a) Mustard cake
- b) Guar meal
- c) Cotton seed cake
- d) G.N. cake
- e) Gram Ghuni
- f) Wheat bran
- g) Rice bran
- h) Fish meal
- i) Blood meal
- j) Bone meal.

Others:

- a)
- b)
- c)
- d)

(1)	(2)	(3)	(4)
-----	-----	-----	-----

Green Fodders:

- a) Jowar
- b) Bajra
- c) Cots
- d) Benseem
- d) Lucern
- f) Maize
- g) Guar

Others:

- a)
- b)
- c)
- d)
- e)

Dry fodder:

- a) Wheat Bhusa
- b) Rice straw
- c) Bajra Karbi
- d) Jowar Karbi
- e) Maize Karbi
- f) Barley Bhusa
- g) Gram Bhusa

Others:

- a)
 - b)
 - c)
 - d)
 - e)
-

26. Problems faced by the villagers in disposing of their dead animals.

(c)

(d)

(e)

27. MACHINERY AND IMPLEMENTS:

Name	Number	Problems of fuel availability, quality, prices etc.	Problems of repairs, spare parts etc.
------	--------	---	---------------------------------------

- a) Tractor
- b) Cultivators
- c) Disc Harrow
- d) Bar Harrow
- e) Leveller
- f) Seed-cum-fertilizer drill.
- g) Maize sheller
- h) Trolley
- i) Bullock carts:
 - (i) Rubber tyre
 - (ii) Ordinary
- j) Chaff cutters:
 - (i) Power driven
 - (ii) Hand driven
- k) Cane crusher
- l) Mould Board Plough

Others (Specify)

a)

b)

c)

d)

e)

f)

28. Details of coverage by Irrigation facilities.

A. Canal

Area covered	Problems of Water Getting water allot- on time ment	Whether water is sufficient as needed; if not, why?	Other problems.

B. Tubewells

Area covered	Problems faced by the owners

29. Has any agency so far conducted water survey? Yes/no

30. If 'Yes' in which year? _____

31. Consumption of electricity (Kwt.) _____

32. Problems with regard to:

(a) Mechanic

(b) Transformer theft.

(c) Availability of new connections.

(d) Electricity Breakdowns.

(e) Electricity supply.

33. How much time is required in getting new connection? _____

34. Infrastructures:

Item	Availability in the village	If not avail- able in the village, how far it is available in other village.	Problems faced by the villa- gers.
	Yes-No	Distance	
a) Seed supplying agency			
b) Stockmen			
c) Fertilizer- depot.			
d) Fair Price shop			
e) <u>Others</u> (Specify):			
(i) Flour Mill			
(ii) Oil Press			
(iii) Medicine			
(iv) Clothing			
(v) Utensil			
(vi) Repairs			
(vii) Electrical			
(viii) Tailoring			
(ix) Building Material			
(x) Furniture making			
(xi) Potteries			
(xii) Grocer.			

35. Whether custom service facilities in the village are available?
If 'yes', give details:

- (a) Types of custom service.
- (b) Scope for different custom services:
- (c) Problems faced by different categories,
of people:
- (d) If custom service facilities are not available in
the village, then:
 - (i) do the villagers want custom service
in the village? Give reasons: Yes/No
 - (ii) Suggestions of the villagers:

36. Whether repair facilities and spare parts of
tractors and machinery are available in the
village?

37. Extension Agencies:

Name of the Agency	Villagers' opinion about the effectiveness of the extension agency	Problems faced by the villagers.
(1)	(2)	(3)
a) Department of Agriculture.		
b) Cooperative Deptt.		
c) Small Scale Industry.		
d) Agro-Service Centres.		
e) University(D.E.S.)		
f) Primary Health Centre		
g) Veterinary Services.		

38 Marketing:

(a) Commodities sold	Local	<u>Outside/distance</u> Preferences
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		
(b) R Commodities purchased		
(1)		
(2)		
(3)		
(4)		
(5)		
(6)		
(7)		

39. What are the villagers which are dependent on your village for various transactions

40. What are main development in the village since independence

41. Any other problems/suggestions of the vill-gers not covered above

APPENDIX - B

INTEGRATED RURAL DEVELOPMENT PROJECT, HISSAR.

Proforma for household survey

(Small and Marginal Farmers/Landless Labourers/Artisans)

Sr.No. _____ Name of the village _____

1. Name of the head of the family _____ Social status/ membership _____

2. Caste _____ Type of family _____ (Joint/Nuclear)

3. Main occupation _____ Subsidiary occupation(s) _____

4. Name of the respondent and his/her relation with the head. _____

5. Family composition: Total members _____

Age group	Male	Female	Worker	Non-worker	Educational status	Remarks
Below 5 years						
5 to 10 years						
10 to 15 years						
15 to 35 years						
35 to 60 years						
Above 60 years						

Total

6. Do all the children go to school? Yes / No
(If not, give reasons)

7. Employment pattern of the family:

Occupation	Number of days employed				Remarks
	Kharif	Rabi	Summer	Total	
(i) Farming					
(ii) Dairying					
(iii) Poultry.					
(iv) Service					
(v) Wage work					
(vi) Others (specify)					

Total

8. Annual production/income:

Source	Operational size/number	Form of produce	Quantity	Rate	Value
(a) <u>Farming</u>					
i)					
ii)					
iii)					
iv)					
v)					
(b) <u>Dairy</u>					
i)					
ii)					
iii)					
(c) <u>Poultry</u>					
i)					
ii)					
(d) Wage work					
i)					
ii)					
(e) Others (specify)					
<hr/>					
Total					

9. Suggest measures to increase your present family income.

10. Family assets and liabilities:

ASSETS			LIABILITIES		
Particulars	Description	Value	Particulars	Description	Value
Land			(i) Loans		
(i) Owned			(ii)		
(ii) Leased in			(iii)		
Buildings			(iv)		
Livestock			(v)		
Stores					
Others					
<hr/>					
Total					

11. Which occupation would you like to adopt for increasing your family income? (Mention in order of preference)

- (a) Dairying
- (b) Sheep rearing
- (c) Piggery
- (d) Cottage industry
- (e) Others (specify)

12. What sort of assistance would you require?

Particulars of assistance	Volume/ quantity	Terms	Duration	Remarks
(a) Financial				
(b) Technical				
(c) Marketing				
(d) Others (specify)				

13. If you need any training, who will go for it?

Name	Age	Qualification
1.		
2.		
3.		

14. Would you like to start on cooperative line? Yes/No
If 'Yes', who are likely to join?

15. Any other problem and suggestions regarding employment and income.

APPENDIX - C

Proforma for survey on the socio-economic status of rural women

Sr.No. _____ Name of the village _____

1. (a) Name of the Respondent _____
(b) Relation with the Head of the Family _____

2. Religion _____ Caste _____ Education _____

3. Type of family: Joint/Nuclear _____

4. Family composition:

Sex	Age	Education	Marital status	Occupation	
				Main	Subsidiary

Male:

- (1)
- (2)
- (3)
- (4)
- (5)
- (6)
- (7)

Female:

- (1)
- (2)
- (3)
- (4)
- (5)
- (6)
- (7)

5. Employment pattern of the female adults (Number _____)

Sr. No.	Occupation	Number of days for which employed in a year	Remarks
(1)	Farming		
(2)	Dairying		
(3)	Poultry		
(4)	Piggery		
(5)	Wage work		
(6)	Sheep and goat rearing		
(7)	Tailoring		
(8)	Weaving		
(9)	Others (specify):		
	(i)		
	(ii)		
	(iii)		

6. Who makes decisions on the following issues? -

Sr. No.	Issues	Relation with the respondent
(1)	Education (a) Boys (b) Girls	
(2)	Household expenditure	
(3)	Marriage (a) Boys (b) Girls	
(4)	Purchase of agricultural assets (a) Machinery/equipment (b) Livestock (c) Land (d) Others (specify)	
(5)	Loans/Borrowings	
(6)	Sale of Assets/Produce (a) Livestock (b) Grains (c) Milk and milk products (d) Others (specify)	

7. Which of the following occupations would you like to adopt for increasing your family income?

- (1) Spinning and weaving
- (2) Cutting and tailoring
- (3) Food processing
- (4) Toys and doll-making
- (5) Embroidery
- (6) Knitting
- (7) Vegetable growing
- (8) Papier mache
- (9) Cane work
- (10) Others (specify)

8. What sort of financial and/or technical-help would you need for augmenting the family income?

- (a) Financial
- (b) Technical

9. (a) In which month can you conveniently come for training?
(b) What should be the most suitable time for training?

house

- (i) Ghar
- (ii) Ghare
- (iii) Baithak

11. Kitchen facilities

- (a) Indoor kitchen Yes/No
- (b) Outdoor kitchen Yes/No
- (c) Others (specify) Yes/No

12. Cooking facilities

- (a) Wooden chulha Yes/No
- (b) Smokeless chulha Yes/No
- (c) Angithi - portable Yes/No
- (d) Kerosene stove Yes/No
- (e) Gas (Gobar Gas Plant) Yes/No
- (f) Tandoor Yes/No
- (g) Others (if 'yes', specify) Yes/No

13. Food Storage facilities

Are they satisfactory for

- (a) Cooked Food Yes/No
- (b) Raw Food Yes/No
- (c) Bulk supplies Yes/No

14. What are the methods used for storage of grains and cooked foods

Grains

Cooked foods

- (a)
- (b)
- (c)
- (d)

15. Garbage disposal

- | | |
|-------------------------|--------|
| (a) Burnt | Yes/No |
| (b) Buried | Yes/No |
| (c) Fed to animals | Yes/No |
| (d) Scattered | Yes/No |
| (e) Used for manuring | Yes/No |
| (f) Any other (specify) | Yes/No |

16. Ground Water Drainage

- | | |
|------------------------------------|--------|
| (a) Drains in house | Yes/No |
| (b) Type of drains (Pucca/Kutchha) | Yes/No |
| (c) Soak pits | Yes/No |
| (d) Septic tanks | Yes/No |

17. Source of water supply and water storage

- | | |
|-------------------------------|--------|
| (a) Source of water supply | |
| (i) Surface water (canal) | Yes/No |
| (ii) Well (dug/bored) | Yes/No |
| (iii) Taps | Yes/No |
| (iv) Hand-pumps | Yes/No |
| (v) Any other (specify) | Yes/No |
| (b) Water stored in | |
| (i) Drums | Yes/No |
| (ii) Buckets | Yes/No |
| (iii) Tanks (cemented) | Yes/No |
| (iv) Pitchers | Yes/No |
| (v) Any other (specify) | Yes/No |
| (c) Is water supply adequate? | Yes/No |

18. Pests

Is dwelling free of

- | | |
|----------------------------|--------|
| (i) Rats | Yes/No |
| (ii) Mice | Yes/No |
| (iii) Snails | Yes/No |
| (iv) Cockroaches | Yes/No |
| (v) Lice | Yes/No |
| (vi) Bed bugs | Yes/No |
| (vii) Termites | Yes/No |
| (viii) Any other (specify) | Yes/No |

(v)

19. Domestic Animals

(a) <u>Type</u>	<u>Number</u>	
	(i)	
(ii)		
(iii)		
(iv)		
(v)		

(b) <u>Place where kept</u>	<u>With family members in the same house</u>		<u>Separately</u>	
	Yes	No	Yes	No

20. Remarks.

(Specify any other remarks concerning living conditions)

- : :-



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