

Changing Scenario in Farming

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INTRODUCTION

Farming continues to be the primary occupation of almost three-fourth of our population even today. This means that farming will continue to be the major occupation for many more decades to come. It is felt essential to understand the major bottlenecks in farming as a result of changing social situations. By this, it may be possible to suggest ways and means in achieving a conducive environment for farming and thereby encourage the potential farmers to take up farming in the years to come. This could be possible only by an indepth research, to understand the changes that had taken place in the farming environment in the past decade.

RESEARCH METHODOLOGY

The study was conducted in Kinathukadavu block of Coimbatore district in Tamilnadu. The sample size of 200 farmers having more than 10 years of farming experience was selected by random sampling procedure from five selected villages. To measure the changing trends in farming situation, 18 indicators were selected based on the perusal of relevant literature, results of pilot study, consultation with social scientists, and officials of the development departments working in the study area. The selected indicators were operationalised and appropriate measuring procedures were followed.

The change that had occurred relating to the indicators was measured, considering the changes that have occurred over the period from 1987 to 1996.

RESULTS AND DISCUSSION

The results are presented in table 1. It could be observed that among those who involved in leasing of land majority of them experienced medium level change followed by low (36.36%) and high levels (23.64%). The reasons could be considerable change in labour availability (short-

age), cost of labour (increase), labour migration (increase), and the availability of irrigation water (decrease) in the study area.

Among the total respondents, 29 per cent reported shift in occupation. Of them nearly (36.39%) equal percentage experienced the low and medium level changes. Establishing of small and large scale industries in the surrounding of the study area, growth of cottage industries like fibre and coir manufacturing in the study area may be considered as some causes for the change.

Farmers and the family members in general do not have the practice of moving out. Of the 23 per cent of the respondents reported the change, it was experienced by 50 per cent of the respondents at low level followed by medium (32.61%) and high levels (17.39%).

The reasons for the migration of respondents could be the non remunerative nature of farming, availability of non-farm employment opportunities throughout the year in the nearby industries, the frequent transport facilities to the nearby towns and cities, the aspiration for white collar jobs and city life and the changing value system. Also the increased literacy rate would have induced the youth to go out for seeking job.

Generally the farmers have the tendency to sell their produce at the farm gate itself though they do not command remunerative price. Change in marketing pattern was felt by about one-third of the respondents in all the three levels. The credit orientation behaviour of the farmers in the study area has changed, due to the availability of institutional credit and the awareness of farmers about such credit facilities. As a result they are relieved from the clutches of local money lenders and not forced to sell the produce to them at the price dictated by them. It was also observed from the secondary data that the availability of marketing infrastructural facilities has increased during the decade, especially the co-operative societies, regulated market and wholesale daily vegetable market. The exposure of farmers to mass media has considerable increased their level of market information. Also

Table 1: Particulars of Respondents Reported Changes in Farming (n = 200)

S.No.	Indicators of Change	Low*		Medium*		High*		Total**	
		No.	%	No.	%	No.	%	No.	%
1	Leasing of Land	20	36.36	22	40.00	13	23.64	55	27.50
2	Shift in occupation	23	39.65	21	36.21	14	24.14	58	29.00
3	Migratory pattern	23	50.00	15	32.61	8	17.39	46	23.00
4	Marketing pattern	71	35.50	63	31.50	66	33.00	200	100.00
5	Diversification	45	32.64	81	59.13	11	8.03	137	68.50
6	Land utilization	55	27.50	113	56.50	32	16.00	200	100.00
7	Shift in cropping pattern	19	9.50	129	64.50	52	26.00	200	100.00
8	Cropping intensity	106	53.00	48	24.00	46	23.00	200	100.00
9	Wage rate	45	22.50	116	58.00	39	19.50	200	100.00
10	Wage structure	10	5.00	102	51.00	88	44.00	200	100.00
11	Efficiency of farm Labour	125	62.50	65	32.50	10	5.00	200	100.00
12	Involvement of family Labour	128	64.00	67	33.50	5	2.50	200	100.00
13	Labour diversity	12	6.28	157	82.20	22	11.52	191	95.00
14	Inputs used	35	17.50	79	39.50	86	43.00	200	100.00
15	Adoption for farm technologies	12	6.00	51	25.50	137	68.50	200	100.00
16	Use of labour saving implements	48	24.00	138	69.00	14	7.00	200	100.00
17	Timeliness of farm operations	139	69.50	56	28.00	5	2.50	200	100.00
18	Cost of cultivation	20	10.00	92	46.00	88	44.00	200	100.00

* Percentage to total respondents reported changes in farming

** Percentage to total respondents interviewed

the recent shift in cropping pattern to hybrid cash crops and perennial crops forced them to sell the produce with the help of commission agents, regulated markets and other co-operatives.

Uncertainty in farming is very common. To overcome this situation one or more farm enterprises are mixed in farming by utilizing the available farm resources in a better way. Of the reported 68.50 per cent of the total respondents, majority of them (59.13%) experienced it at medium level.

It has already been mentioned that labour shortage is one of the key factors in the study area which takes away the interest of farmers from farming. Also the scarcity of water in the area for irrigation due to the drought they experienced during 1985-87, could be the other cause for the consequence "diversification". Besides the above factors the low income, increased cost of cultivation, uncertainty in farming and the increased family expenditure also might have led to diversification.

Land is the limited factor for most of the farmers. The land is utilized by the farm families for various purposes. Majority (56.50%) of the respondents experienced the medium level change in the study area. It was observed that in the farm families one to three enterprises were included for increasing the farm income. Dairy

was included by majority of the farmers since loan facilities were made available by co-operatives and banks for the purchase of exotic breeds. This could have forced them to expand the cattle shed with adequate facilities and also farmers to use tempo-vans for bringing in manures, fertilizers and other inputs and also for transporting the farm produce. This has necessitated in widening of the existing farm roads and extending to the portions of the farm not covered earlier.

The growth of agriculture is indicated by the increase in the total production of crops in that area. Change was made by all respondents. Of them, majority (64.50%) of them felt it at medium level followed by high (26%) and low levels. This finding derives support from Vivekananda and Satyapriya (1994) who reported that change in cropping pattern had increased at a high level.

The shift in cropping pattern might be due to many social, physical and biological factors. The labour shortage, scarcity of irrigation water and low rainfall might have forced the farmers to shift the cropping pattern by selecting cash crops and perennial crops. The biological factors like pests and diseases and the social factors like urbanization, institutional factors like credit, marketing etc., might also be the causes.

Cropping intensity is an indicator for the

effective utilization of the land available for cultivation. Cropping intensity mainly depends on the rainfall and the groundwater potential. The change in the above factors leads to change in cropping intensity. The change was felt by majority (53%) of the respondents at low level nearly equal percentage (23-24%) of them were in the other two levels.

While perennial crops and cash crops are selected naturally cropping intensity would be reduced. Likewise cash crops are selected and cultivated by majority of the farmers which require much water and also longer in duration compared to other food crops. In dryland due to low rainfall they could hardly cultivate only in one season.

In an area where industrialization is rapid and urbanisation is fast, change in wage rate is not uncommon. The wage paid to farm labours has a direct bearing on the labour availability. Change was experienced by a majority (58%) of the respondents at medium level.

In the study area it was observed that in 80's wage rate for males ranged from Rs.30 to Rs.45/day while for females it ranged from Rs.15 to 25. But in 90's for males it ranged from Rs.70 to 85 and for females it ranged from Rs.25 to 35. In general the male labours perform the difficult farm operations such as ploughing, irrigation, fertilizer application and harvesting which require more amount of energy. The labour when they had opportunity to receive an equal or increased wage rate from non-farm employment they would prefer to shift from agriculture to non-agricultural sector and this would result in labour scarcity in agriculture, leading to wage hike in farming too. During peak seasons of farm operations the farmers had to offer more wages, in order to lure the agricultural labourers to farming. The ever increasing cost of living also might have lead to increased wage rate.

Earlier in general agriculture labourers were paid in kind as wages. However, for certain operations they were paid in cash. But recently, the type of payment has changed. The periodicity of payment varied from yearly to seasonally to monthly to weekly and daily depending on the labourers attachment with the farm. As change, 51 per cent of them experienced the change at medium level followed by 44 per cent

at high level. This finding corroborated with Karthikeyan (1995) who stated that wages in kind had increased on an average for women harvesting labourers and men threshing labours. The payment of wages in cash has increased in the place of payment in kind. As far as the labourers are concerned, the kind payment has many disadvantages. When the wages are paid by cash they are able to buy the goods and services at their will from the cash they get. And also from the study it was found that the system of permanent labourer has decreased, where periodicity of payment is yearly, monthly and seasonal. This system has changed either to casual or contract system. In the casual system, the payment is daily and in the contract system the payment is based on the quantum of work done. The above factors might have influenced the consequence change in 'wage structure' in farming.

Efficiency of labour is getting reduced. The labourers were not able to bring forth the expected output as expected by the employer. All the respondents has experienced the change and it was felt at all levels.

Labour shortage is one of the key factors which is responsible for the reduction in efficiency of labour. In 80's the agricultural labourers had the practice of working in the field for 8 hours with commitment to complete the work againsted. In 90's the trend has changed completely. Industrial development in an area relates to increased job opportunity at high wage rate and thereby attracts labourers from other sectors particularly from the farming sector. This has enabled them to choose the days of work and type of work by themselves with considerable reduction in the working hours. During peak season with heavy demand for more number of farmers the available labourers dictate terms not only on wage but also on the duration of work. As a result the working hours for farm labourers has been reduced to 5-6 hours / day. With the interest of completing the farm operations in time, the farmers employ these casual labourers though the efficiency is low.

The main sources of labour is farm families and agriculture labour households. Involvement of farm family members in farming operations decreased as the size of farm increases. At present farming is becoming more an individual activity

of the farm operator than family activity. Change in involvement of family labour was also reported by all the respondents. It was experienced at low level by majority (64%) of the respondents followed by medium (33.50%) and high levels (2.50%).

The involvement of family labourers at low level might be due to the increased economic status of the farm family, the involvement of family members in other subsidiary occupation and the introduction of mechanization for harvesting and processing activities. The involvement of family labour at medium level could be due to the dependence of small farmers on the family members for most of the farming operations unlike the big farmers. Even now in small families, farming is the primary occupation and also it is the family occupation where one cannot expect much change and hence more involvement.

The transport and communication systems available in the study area have brought about the markable change in the village by way of extensive labour mobility from villages to nearby towns particularly the youth of both the sexes. The change was experienced by 95.50 per cent of the respondents. Among them 82.20 per cent had experienced medium level followed by (11.52%) and low levels (6.28%) respectively.

In the study it could easily be observed that there was a marked change in the availability of labour due to the mobility of labour to the nearby towns. Where they are readily accepted by the non-farm sector, got better wage, assured income throughout the year and time bound job with perquisites. Besides the above factors, the off-farm and non-farm employments available in fibre and coir manufacturing industries and granite quarries also might have contributed for this change.

Before the introduction of high yielding varieties the inputs needs of the farmers were met from within the farm and by friends and relatives. Nowadays due to various reasons the farmers are forced to depend on the external sources for their inputs. In the study area all the respondents had reported the change in types of inputs used. This change was felt at high level by 43 per cent of the respondents followed by medium level (39.50%) and low level (17.50%).

In the study area due to the non-availability of water for irrigation and labour shortage they have changed their cropping pattern by switching over to cash crops and perennial crops from traditional food crops. The cash crops need more of inputs such as hybrid seeds, seed materials, fertilizers, pesticides and water. Hence necessarily they have to depend on the external sources to meet the requirements. This change was felt by less percentage of respondents at low level. This might be due to the cultivation of traditional food crops like ragi and cholam in drylands which do not need much external inputs.

In order to increase the yield and income the farmers adopted modern farm technologies which were introduced during and after green revolution. Adoption of farm technologies was reported by all the respondents. Of all the respondents majority of them (68.50%) experienced the consequence at high level. Medium level was experienced by 25.50 per cent of the respondents followed by 6 per cent at low level. The causes for the adoption of technologies could be the exposure of farmers to mass media, the availability of Agricultural Extension Centre within the reach of farmers, effective functioning of farmers discussion group the presence of private companies which introduced hybrid vegetables and scientific technologies and the shift in cropping pattern by cash crops.

Modern tools and implements play a vital role in increasing the farming efficiency. They are useful for taking up farm operations in time and they serve as labour saving devices as in the case of tractors, motor pumpsets, threshers power sprayer and dusters. It could be observed from the table that 69 per cent felt the use of labour saving implements at medium level followed by 24 per cent at low level and 7 per cent at high level.

Due to urbanization and industrialization the farmers experienced acute labour scarcity, resulting in delayed farm operations. For the cash crops the operations are to be carried out in time to get maximum return. To overcome this situation the farmers in the study area have started using labour saving farm implements and machineries.

Nowadays farmers are unable to carry out farm operations in time due to various reasons.

If they do not carry out the farm operations in time all their efforts would be in vain. All the respondents in the study area reported the change in timeliness of farm operations. The consequence was felt by 69.50 per cent at low level followed by 28 per cent at medium level and high (2.50%) levels.

The main causes for the consequences might be the high seasonal labour demand, labour scarcity, labour migration to non-farm sector, the wage hike of labourers and the non-availability of inputs like seeds, fertilizers, pesticides and credits in time.

Cost of cultivation is one of the economic factors which farmers always consider in crop production. The farmers are interested in minimising the cost so as to maximize the profit. In this study all the respondents had reported the change in cost of cultivation followed by high (44%) and low levels (10%).

The cost of cultivation has increased due to the external inputs like hybrid seeds, fertilizers and pesticides and cost of labour and the transportation cost in bringing them from outside also adds to the total cost of cultivation. Besides, the decreased value of money might also be one of the factors for the increased cost of cultivation.

CONCLUSION

From the above analysis it is observed that the management of agricultural labour is becoming increasingly difficult. To mitigate it, selective mechanization should be encouraged by providing suitable labour saving implements and machineries for peak season operations. In addition to the above, the available labourers could

be effectively trained in various operations. As the wage rise of labour seems to be illusory comparing the wages of urban-non-farm labourers, target group oriented welfare schemes may be intensified in the rural areas to boost their income and to prevent migration. The prohibitive cost of land, faulty pricing in agriculture and other such factors may drive the farmers away from agriculture itself, which may ultimately prove fatal to the society. These problems can be tackled only by a package of collective, holistic, participatory and systematic approaches.

KEY WORDS Occupation. Cropping Pattern. Wage Structure. Farm Technologies.

ABSTRACT Indian economy is mostly dependent on agriculture or farming. Farming is definitely dependent to a large extent to the existing social, cultural, economic and overall environment that prevail in the villages and remained heavily linked. The growth of modern communication facilities has reduced the world to a global village. The increased awareness about the modern way of life has induced considerable changes in farming environment. Hence this study with the objective of analysing the changes that have occurred in the farming situation over the period from 1987 to 1996 was made. The results indicated that majority of the respondents experienced changes in leasing of land, shift in occupation, farm diversification, land utilisation pattern, shift in cropping pattern, wage rate, wage structure, labour diversity, use of labour saving implements and cost of cultivation at medium level, whereas changes in the type of inputs uses and adoption of farm technologies were felt at higher level.

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