Available online at www.elixirpublishers.com (Elixir International Journal)

Production Management

Elixir Prod. Mgmt. 32 (2011) 2108-2110

ISSN: 2229-712X

A study on labour absorption in agriculture: with special reference to Salem district, Tamilnadu

K.M. Senthilkumar

Department of Economics, Salem Sowdeswari Collage, Salem -636010, Tamilnadu, India.

ARTICLE INFO

Article history:

Received: 10 February 2011;

Received in revised form:

26 February 2011;

Accepted: 3 March 2011;

Keywords

Agricultural Labour,
Labour Absorption in Agriculture,
Dry and Wet land Employment,
Job opportunities in primary sector,
Male and Female participation in Crop cultivation.

ABSTRACT

The present Study Discuss Labour Absorption in Agriculture, employment generation is one of the major objective of the developed and developing countries. Labour is one of the important factors of production in Indian economy, particularly in rural economy, rural industries and small scale industries. As India is a country of villages, three fourth of Indian population is living in rural Indian and two, third of this population directly or indirectly depends on the agricultural sector for live Livelihood (Planning Commission 1990). In India the number of person employed in industry, relatively to agriculture is small consequently large portion of the labour force will continue to obtain their sustenance from farm and farm related occupations. At least during next two or three decades, the agricultural sector must provide employment opportunities in rural areas. The studies conducted in the past have broadly concluded that technological progress based on seed, fertilizer and irrigation is generally labour-using in nature whereas mechanization via tractors, pump sets, harvesters and threshers is usually labour –saving in nature. However, usually these two aspects of the technological progress are complementary in nature and as such there is no consensus regarding the total effect of technological progress on labour absorption. In this context, both dry land and wet land technologies have been considered to assess labour absorption in Salem District, Tamilnadu.

Introduction

Employment generation is one of the major objective of the developed and developing countries. Labour is one of the important factors of production in Indian economy, particularly in rural economy, rural industries and small scale industries. As India is a country of villages, three fourth of Indian population is living in rural Indian and two, third of this population directly or indirectly depends on the agricultural sector for live Livelihood (Planning Commission 1990). In India the number of person employed in industry, relatively to agriculture is small consequently large portion of the labour force will continue to obtain their sustenance from farm and farm related occupations. At least during next two or three decades, the agricultural sector must provide employment opportunities in rural areas.

The planning commission also reports that 2 per cent of growth in population creates hundred million people, join the army and also have find job in agriculture and in allied activities (Sarthi Achaya 1992). To what extent, this can be done is question often raised but seldom answered. Also it is understood that the agricultural labour group is highly unskilled, illiterate, unorganized and is the social group highly exploited by the powerful land owners. Hence job security is totally absent in agriculture. A large proportion of them remain unemployed during slack season. These facts clearly reflect the miserable conditions and challenges encountered by the class.

It is universally accepted that irrigation in stabilising agricultural and employment opportunities in irrigated area are bound to increase. Intensive ploughing, weeding and other agriculture operations are also increased through irrigation. This process of modernization, is associated with irrigated area and cropping intensity, would increase labour employment in agricultural sector.

Statement of problem

An important issue is that of technological progress in Indian agriculture, widely debated recently is regarding changes in the input mix and relative shares of different factors of production. In this regards the studies conducted in the past have broadly concluded that technological progress based on seed, fertilizer and irrigation is generally labour-using in nature whereas mechanization via tractors, pump sets, harvesters and threshers is usually labour –saving in nature. However, usually these two aspects of the technological progress are complementary in nature and as such there is no consensus regarding the total effect of technological progress on labour absorption. In this context, both dry land and wet land technologies have been considered in our study to assess labour absorption in Salem District.

Objectives

1. To make a comparative analysis of Labour absorption in dry and wetland Farmers.
2. To study the impart of mechanization in labour absorption

Review of literature

Muhammad Javed Iqbal (2008) points out that India's Ninth - Five Years Plan projects generation of 54 million new jobs during the Planed period (1997 -2002). The study indicated that the performance has always fallen short of target in the past, and few believe that the current Plan will be able to meet its target. India's labour force is growing at the rate of 2.5 per cent annually, but employment is growing at only 2.3 per cent. Thus,

Tele: 94436 94914
E-mail addresses: ka.senthil.km@gmail .com

the country is faced the challenge, not only absorbing new entrants to the job market (estimated at seven million people every year), but also clearing the backlog. 60 per cent of India's workforce is self-employed, many of whom remain very poor. Nearly 30 per cent are casual workers (i.e. they work only when they are able to get jobs and remain unpaid for the rest of the days) only about 10 per cent are regular employees, of which two-fifths are employed by the public sector. More than 90 per cent of the labour force is employed in the "unorganised sector", i.e. sectors which does not provide with the social security and other benefits of employment in the "organised sector".

Ranjit Singh Ghuman, (2009) stated that The South Asian countries continue to be predominantly rural and agrarian in terms of the share of population and workforce.

The proportion of rural population and workforce ranges between 60 to 80 per cent, respectively. The very success of green revolution" has, however, put a great pressure on environment, ecology, water resources, and the very sustainability of agriculture.

Agricultural development in these countries did not go along the Kaldor, Kuznets long term dynamics of agrarian transformation and thereby rural transformation. As such the diversification of rural economy, not only in terms of output, but also in terms of employment, is imperative for the sustainability and development of the rural economy.

The low productivity agricultural activities, ever, rising rural unemployment, shrinking labour absorption capacity of agriculture are other very serious limitations of the rural and agrarian economy of these countries. All this has resulted in increased rural, urban gap and a growing sense of deprivation on the part of rural population.

Vinod K Anand (2009) expressed that the problems of employment creation, income-distribution and poverty alleviation are common to most low and middle-income countries. India is no exception. Despite a paradigm shift in the whole macro-economic management in 1990-91, the social indicators of absolute poverty line, the Gini-Lorenz ratio, and unemployment rates present a mixed scenario.

Whereas the number of people below the property line declined from a massive 54.9 per cent in 1973-74 to a low of 36 per cent in 1993-94, and inequalities in the distribution of consumption expenditure (in terms of the Gini-Lorenz ratio) have declined over time to title less than 0.30, the improvement in the unemployment, which was 1.90 per cent of the labour force in 1993-94, went up to 2.33 per cent during 1999-2000. Although it has witnessed a steady decline, the number of poor people remained stable at around 320 million for a fairly long period of two decades, the eighties and the nineties, due to a countervailing growth in population, and beyond that the poor are still subject to periodic malnutrition during periods of man-made and natural disasters. Although poverty has declined at the macro level, the rural-urban and inter-State disparities are still visible.

Methodology

Tamilnadu

The selection of Tamilnadu is owing to its agricultures preponderance.

Tamilnadu achieved significant results in the production of food grains, using high yielding varieties [HYV].Besides, farmer's exhibit better receptiveness to new technology. The pace of development activity in Tamilnadu with a waste majority of agricultural population is set by the tempo of production in the form front.

Selection of District

This study was conducted in Salem district, which was purposively selected for this study on the following grounds. Salem district is an agrarian economy. The most of the rural population are depending upon agriculture sector for their lively hood and half of them are agricultural laborers.

In this district, working population is 11.37 lakhs accordingly for 43 percent of the total population. The unemployment problem also exists in this district, so there is a need of improving the potentiality of agriculture to provide gainful employment.

Selection of Taluks

Salem district has nine Taluks and they are classified on the basis of predominance of wet and dry land cultivation. Based on the classification, dry land taluk known as Omalur and wet land taluk known as Idappadi were chosen as sample taluks.

Selection of Blocks and villages

After the selection of taluks, one of them was selected for the study. Idappadi block in Idappadi taluk, Tharamangalam block in in Omalur taluk, were selected for the study. Idappadi block is located at Cauvery Delta area and it represents the wet agro- economic condition and Tharamangalam block represents dry agro- economic condition. In Tharamangalam block, Arurpatti village was chosen. Also Idappadi block and Poolampatti village were chosen for the study.

Selection of Farm Respondents

From Arurpatti dry land and Pollampatti wet land, 10 per cent of farmers were selected for the study. From the 1496 farmers in Arurpatti, 150 farmer respondents and from the 1607 farmers in Poolampatti, 160 farmer respondents were selected for the study. The total number of farmers in dry land village and wet land village are 3103; it was felt that as 10 per cent sample (310 farmer respondents) would be sufficient to keep the study manageable and to get statistically tenable results.

Field Investigation

Primary data were collected by interview with dry land and wet land farmers in the study area. The data were collected from total own labour, total hired labour, total own and hired labour, total animal labour and total Mechanical labour employment of the study area in paddy cultivation.

Tools of data analysis

The Pooled data have been analyzed with the help of T-test.

Limitation of Study

The labour absorption of the study was confined to comparatively a shorter period of only one agricultural year (2010), because the farmers did not maintain farm records about agricultural operations and other related interaction. Obviously time and cost constraints have restricted the researcher in taking samples at a large scale.

Result and discussion

Own Labour Absorption

The table1 explains the own labour absorption. The average hours of labour absorption per acre for dry land farmers was found to be 77.00 hours, whereas the average hours of labour absorption were found to be 87.68 hours, for wet land farmers. T-test was applied to find whether there was any significant difference between dry and wet land farmers in the average hours of labour absorption.

The calculated T- value was found to be 3.939 and it was found to be significant at 1 per cent level. This indicates that there is significant difference between dry and wet land farmers in the average hour of labour absorption per acre.

Hired labour Absorption

The table 1 shows the hired labour absorption. The average hours of labour absorption per acre for dry land farmers was found to be 146.97 hours, whereas the average hours of labour absorption were found to be 215.48 hours, for wet land farmers. T- test was applied to find whether there was any significant difference between dry and wet land farmers in the average hours of labour absorption. The calculated T value was found to be 7.057 which are found to be significant at 1 per cent level. This indicated that there is significant difference between dry and wet land farmers in the average hours of labour absorption in per acre.

Own and hired labour absorption

The table 1 explains the own and hired labour absorption. The average hours of labour absorption per acre for dry land farmers was found to be 223.97 hours whereas the average hours of labour absorption was fond to be 303.16 hours, for wet land farmers. T-test was applied to find whether there was any significant difference between dry and wet land farmers in the average hours of labour absorption. The calculated T- Value was found to 6.798 which were found to be significant at 1 per cent level. This indicates that there is significant difference between dry and wet land farmers in the average hours of labour absorption in the average hours of labour absorption in per acre.

Animal labour absorption

The table 1 explains animal labour absorption in dry and wet land farmers. The average hours of animal labour absorption per acre for dry land farmers was found to be 37.05 hours, whereas the average hours of animal labour absorption were found to be 40.87 hours, for wet land farmers. T-test was applied to find whether there was any significant difference between dry and wet land farmers in the average hours of animal labour absorption. The calculated T-value was found to be 4.962 which were found to be significant at 1 per cent level. It indicates that there is significant difference between dry and wet land farmers in the average hours of animal labour absorption in per acre.

Mechanical Labour Absorption

The table 1 pictures Mechanical labour absorption in study area. The average hours of mechanical labour absorption per acre for dry land farmers, found to be 79.99 hours, whereas the average hours of labour absorption, found to be 105.45 hours, to wet land farmers. T-test was applied to find whether there was any significant difference between dry and wet land farmers in the average hours of labour absorption. The calculated T-value was found to be 5.382 and it was found to be significant at 1 per cent level. It indicates that there is significant difference between dry and wet land farmers in the average hours of mechanical labour absorption in per acre.

Conclusion

The study point out that the irrigation had led to more labour being absorbed in farm activities, particularly agricultural production in wet land. It may be noted that the assurance of water supply through canal irrigation increase in wetland. In overall views in the study area, the wet land farmers are more employed in own, hired human labour, Animal labour and Mechanical labour in agricultural operational activities, comparatively dry land farmers in the study area.

References

1. Acharya Sarthi, "Labour use in Indian Agriculture Analysis at Macro Level for the Eighties", Indian Journal of Agricultural Economics, 47. 2.1992, P.169.
2. Agarwal Bina, Mechanization in Indian Agriculture: An Analytical study based on Punjab, New Delhi, Allied publishers, 1983.
3. Arun and Patel.s, "Irrigation: Its Employment Impart in The command Areas of Medium Irritation Projects in Gujarat", Indian Journal of Agricultural Economics, 36, 1981, PP.20-30.
4. Dash, R.C. Pradhan, S.C., Behera. P. and Mahaputra. M, "Evaluation, of Bullock farming and power tiller farming systems for groundnut crop in the stated of Orissa India," Agricultural-Mechanization in Asia Africa and Latin America, 24,3, 1993, PP.19-22.
5. Ehuis and R. polson, "A Review of the Economic and Ecological constraints on Animal Draft cultivation in sub-Suharan Africa", Soil and Tillago Research, 1,4, 1993, PP.195-210.
6. Gill, S.S G.Sing and N.Sing, "Impart of Tractorization on Agricultural production and Employment pattern ferozepur District (Punjab)", Manpower Journal, 2 -1979, PP.18-22.
7. Janaiah A. and V.Kiresur, "Employment Potential Hybrid Rice seed production in Rural India-An-Ea-Ante study", Indian Journal of agricultural Economics, 48,3 1993, PP.501-502.
8. Pandya kiran, "labour absorption in Agricultures some issues", Anvesak, 17,1 1987, PP. 45-68.
9. Planning commission, "Employment pars Trends and prospects for 1990.Newdelhi", Government of India, 1990.
10. Dodke, L.B, S.S.Kalmkar, shender and B.L, Doshare, "Resource use Efficiency and productivity of Turmeric", Journal of Soils and crops, 12,1, 2002, PP.124-126.
11. Dhongade, patiland, patil,"participation of women labour in Agriculture in maharastra,"Indian Journal of agricultural Economics,1985,vol.XLNo3PP265-266
12. Muhammad Javed Iqbal, "Growing unemployment problem in India," http://newsgroups derksiler.com/ Archive/ soc/ soc. culture. pakistan/2008-09/msg 00054.html.
13. Vinod Anad, "Labour Absorption : A Unique strength of informal sector in india, mainstrecum", XLVII, 2009. P.25.
14. Venkatanaidu,"Women partipartion in Agricultural Sector,"Southern Economics,2004,vol.No4217PP11-13.
15. Ray A.V. "The present status of Agricultural mechanization and its constraints, Agricultural situation in India", 48,4, 1993, PP.245-250.

Table 1
Group Statistics For Labour Absorption

CATEGORIES	TYPE OF LAND	N	MEAN	STD DEVIATION	T	DF	SIG
Total own labour (Hrs) acre	Dry land	150	77.0027	22.0679	3.939	308	**
	Wet land	160	87.6775	25.3950			
Total hired labour (Hrs) acre	Dry land	150	146.9700	88.1227	7.057	308	
	Wet land	160	215.4813	82.8099			
Total labour own & hired(hrs) acre	Dry land	150	223.9727	104.5019	6.789	308	**
	Wet land	160	303.1587	100.5852			
Total animal labour(hrs)	Dry land	150	37.0467	6.1876	4.962	308	**
	Wet land	160	40.8719	7.2968			
Total Mechanical labour	Dry land	150	79.9933	37.6175	5.382	308	**
	Wet land	160	105.4750	45.1125			