

## EMPLOYMENT OF FARM WORKERS IN MULTIPLE CROPING SYSTEM

Usha Bajpai<sup>1</sup>, Shashi Prabha<sup>2</sup> & R.K. Kushwaha<sup>3</sup>

In recent years there has been more reliance on the agriculture sector in India for employment creation. Structural changes have been effected to transform traditional low productivity of agriculture in to high productivity of agriculture to provide the employment to the rural people, introduction of high yielding short duration varieties & adoption of multiple cropping system are the important factors which have increase agricultural production and created employment opportunities in the rural sector both for male as well as female workers.

The low wage rates of workers alongwith in adequate employment opportunities result into lower income, which force them to lead their lives below poverty line. According to the **All India Rural House Board Survey** conducted by the **National Council of Applied Economics Research (1973)** agricultural labour workers households were at the lowest running of the income ladder in rural areas. The survey revealed that about 60% of agricultural labour household have no land & depend entirely on wage payment for their livelihood. The employment & earning of this segment of population are quite miserable & adversely affect their consumption patterns. At present about 20% of our population are of agricultural labours, who's incomes are mainly from agricultural wages. Agriculture is the gamble of mansoon & so becomes the income of agricultural workers.

The rainfall & its distribution varies from

year to years & so varies the employment in Agriculture. Therefore, it's a common phenomenon to notice unemployment, under employment & seasonal employment of the workers engaged in agricultural operations.

Labour employment in agriculture depends upon number of factors such as irrigation potential, cropping patterns, intensity of cropping & other labour-intensive agricultural activities. The study area-district FARRUKHABAD of UP is well known for multiple cropping system where more than three crops are taken in succession during a year, on the same piece of land. The farmers of the district have tiny holdings (average size being 0.77 hectare) assured means of irrigation facilities & fertility status of the soil enable them to grow 3-4 crops in a year, in which two successive crop of potato occupy an important place, Thus, the farmers use adopt potato base cropping system. The main crop rotation system followed by them are:

Maize-Potato-Potato, Maize-Potato-tobacco, maize-potato-wheat, maize-potato-cucurbits, maize -potato-sunflower etc. These crop rotations being labour intensive in nature required more of human labour in complication of various farm operations in time. Under such type of cropping system the farmers used to employ more workers, which provides more employment opportunities as compared to other cropping systems. Considering above-mentioned facts in view the present study was undertaken with following specific objective:

To Examine the Employment of Farm Workers in Multiple Cropping System

1. Asstt. Prof. (Agril. Eco.) 2&3. Asstt. Prof. (Agril. Ext.), C.S.A.U. A. & T., Kanpur.



## METHODOLOGY

A three stage stratified random sampling technique was used to select the block, villages & farm workers in district FARRUKHABAD. The district FARRUKHABAD was selected purposively because of having highest intensity of cropping in UP due to adoption of multiple cropping system.

Selection of block formed the first stage of sampling. For this purpose, a list of blocks of district FARRUKHABAD (having 150% intensity of cropping & more) was prepared. Then from this list one development block CHHIBRAMAU was selected randomly. Selection of villages formed the second stage of sampling list of all villages of the selected blocks was obtained & then five villages of the block were selected randomly. For the third & final stage of sampling, a list of farm workers household was prepared for all the selected villages. Now from this list a sample of 50-farm workers household was selected on the basis of their proportion falling under each village.

In Case of distribution of working force on sample labour household, male & female workers were considered as a equal unit while children of 10-15 years of age were converted in to adult units (counting two children's equal to one adult unit) & were kept in their respective sex group.

Survey Method conducted the study, data were collected by personal interviews with the

respondents, on schedule prepared in advance.

The break up of casual labour (Hired Labour) days into male & female units used in different crop rotations have been worked out in Table 1. It indicates the pattern & extent of male & female labour use in major crop rotations of the study area.

Table 1. show that of the total casual labour employment in different crop rotations, female workers shared lower than male workers. Female workers participation in different crop rotations ranged between 46 - 48 Percent as compared to those of male workers where it came to 52 - 54 percent of the total casual labour days. In terms of days, female workers got employment varying from 62.50 days to 145 days in different crop rotations. Their employment was highest in Maize - Potato - Potato, crop rotation (145-days/ hectare) & lowest being 62.50 days in Maize - Wheat rotation. In case of crop rotations having three crops, (300% intensity) Woman employment varied from 96 days to 145 days than those having two crops in a year (200% intensity), where it varied from 62.50 days to 85.75 days per hectare. So far as woman worker employment in different farm operations, it was higher in interculture, harvesting & sowing than those of male workers, in all crop rotation.

### Per farm Worker Employment in Crop Rotation :

As regards per farm workers employment in different crop rotations, it has been given in following table.

Crop Rotation	Casual Labour Employment (in days)			Percentage Share		
	Male	Female	Total	Male	Female	Total
Maize-Potato	62.75	68.60	131.35	47.77	52.23	100.0
Maize - Wheat	42.25	50.00	92.25	45.80	54.20	100.0
Maize- Potato-Potato	106.61	116.0	222.61	47.90	52.10	100.0
Maize- Potato-Wheat	86.12	97.40	183.52	46.93	53.07	100.0
Maize-PotatPumpkin	65.00	76.80	141.80	45.84	54.16	100.0
Maize-Potato-Muskmelon	79.20	86.80	166.00	47.10	52.90	100.0
Maize-Potato-Sunflower	79.52	88.60	168.12	47.30	52.70	100.0



Above Table shows that per farm worker total casual employment varied from 92.25 days to 222.61 days per hectare in different crop rotations. It was highest (222.61 days) in Maize - Potato - Potato rotation & lowest (92.25 days) in Maize Wheat rotation. Further it was higher in crop rotation having three crops in a year as compared to crop rotation including two crops. Of the total casual labour employment woman workers shared for 52 - 54 % in different crop rotations. Thus, table reveals that on per worker basis, Female

workers participation was higher than male workers in different crop rotations.

## CONCLUSION

The average employment per woman worker, per hectare was higher (190.60 days) than male workers (168.40 days) in crop production as a whole. The rate of participation of woman workers was higher than male workers in certain farm operations like sowing (82.30%), Interculture (72.35%), Harvesting (59.22%) & threshing (66.98%).

## REFERENCES

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