

Agricultural Enterprises for Employment Generation: A Study of Andhra Pradesh

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ABSTRACT

A study on Agricultural enterprises was conducted in six villages of three mandals of Krishna district of Andhra Pradesh. 90 Rice farmers were selected by proportionate stratified Random sampling method. The agricultural enterprise generated 381 man days of employment in the study area. Crop + Dairy enterprise 912 man days, Crop + Sheep & Goat enterprise 815 man days and Crop + Piggery enterprise generated 492 man days of employment. The Independent variables; Land holding, Expenditure Pattern, Planning orientation, Production orientation, Market orientation, Achievement motivation, Information Seeking behavior, Risk orientation, Credit orientation, Decision making and innovativeness were found to be significant at 1 per cent and Knowledge on livestock and crop enterprises was significant at 5 per cent level with the dependent variable Employment generation. The Multiple regression analysis revealed that the variables namely planning orientation and decision making were significant at 1 per cent. The value of R^2 (0.44) indicated that all the independent variables put together explained the variation in the employment generation to the extent of 44.00 per cent. The computed F value (2.77) was found to be significant.

Key words: *Agricultural enterprise; Employment generation; Rice;*

Since the Livelihood is the prime concern of the Government, Non-Governmental Organizations and private agencies, the means of providing the basic needs are under continuous search and heavy budget is being invested. The rural India has been supported by the Agriculture and livestock enterprises since ages. Mixed crop-livestock farming is the predominant farming system practiced by over 80 per cent of rural households in the Andhra Pradesh state. Andhra Pradesh is one of the agriculturally most advanced states in India but still has high levels of rural poverty. The share of agriculture sector to employment during 1983-2005 is 52.06 per cent. The rural Unemployment rate was 12 per cent in 2009-10 where as the urban unemployment rate was 31 per cent (*NSS 66th Round*) in Andhra Pradesh. The Krishna district with annual rain fall 1034mm grow major field crops like paddy, blackgram, cotton, greengram, sugarcane, chillies, groundnut, tobacco and redgram. Among these crops Paddy is grown in 394500 hectares in irrigated area which is considered as principal crop of the District. Hence this investigation was carried out

with an attempt to undertake the present research study based on the following research questions; does the Agricultural enterprise (paddy) provides sufficient employment? What are the different variables related with the employment generation?

METHODOLOGY

The state of Andhra Pradesh was purposively selected for the study. Krishna district from Coastal Andhra region was selected for the study by using the procedure of one digit random numbers. The three mandals from district were selected. Two villages from each mandal selected thus six villages were selected by random sampling method. The farmers who were holding crop enterprises especially the principal crop grown in Krishna district i.e. Paddy is taken for the study purposively. Thus a total sample of 90 respondents was selected for the final investigation of the study by simple random sampling method. The employment generation was operationally defined as the additional man days generated to the families due to undertaking

of crop enterprises. The additional employment generation was assessed by identifying the package of practices undertaken in Paddy crop cultivation after consultation of literature, discussion with experts both in Animal Husbandry and Agriculture department and scientists who were working in colleges and research institutes. Thirty judges drawn from Animal Husbandry, Agriculture departments and scientists of livestock and agricultural research stations were selected to give their responses on a five point continuum 5, 4, 3, 2 and 1 for most suitable, more suitable, suitable, not suitable and not at all suitable respectively to indicate the suitability of the package of practices for measuring the employment generation variable. The scores of the judges rating were calculated for each package of practice of crop enterprise and mean values were worked out and those activities with weighted mean values equal and above 0.40 were included in the final draft. The respondents were asked to give responses for all the package of practices of Paddy crop in terms of approximate time spent in hours for each practice and was summed up separately, was converted into man days by dividing the total time spent (hrs) by standard working hours per day i.e. 8 hours.

RESULTS AND DISCUSSION

The employment generation (man days per annum per family) by Paddy crop was 381 man days in Krishna district because of its large land holdings, large area under paddy cultivation and good irrigation facilities.

The results clearly indicated in Table 1 that the farmers engaged in agricultural enterprises in the sample area were fully employed as per *Niyanthi (1991)* that officially accepted standards for measuring works are: i) working day of eight hours and ii) working year of 273 days. If a person is willing and able to work for 273 standard days in a calendar year, he is considered to be as fully employed whereas person who works for less than 273 standard days in a year is considered as underemployed. The findings are in tune with those of *Shekhawat et al. (2011)*, *Satyanarayana (2010)*, *Harish et al. (2011)* and *Planning commission (GOI) (2011)* revealed that dairy and agricultural enterprises provided higher employment opportunities and *Nagaratna et al. (2013)* revealed that dairy enterprise provided medium employment. The above studies stressed that the agriculture and dairy farming are important agro based industries for solving the problems of employment and rural poverty.

Table 1: Combinations of major livelihood enterprises and their employment generation in Krishna District of Andhra Pradesh

Livelihood Enterprises	Employment*
Crop + Dairy enterprise	912.46
Crop + Sheep & Goat enterprise	814.78
Crop + Piggery enterprise	491.87

*(man days/annum/family)

Table 2 revealed that there was a significant linear relationship between the socio economic and psychological factors with that of employment generation. It was apparent from the table that the independent variables such as Land holding, Expenditure Pattern, Planning orientation, Production orientation, Market orientation, Achievement motivation, Information Seeking behavior, Risk orientation, Credit orientation, Decision making and innovativeness were found to be significant at 1 per cent and Knowledge on livestock and crop enterprises was significant at 5 per cent level of probability with the dependent variable Employment generation.

It could be implied that agriculture being the main stay of economic activities in the rural sector possession of land holding engaged the farmer in agricultural operations had greater influence over the employment generation. The expenditure pattern had a great effect on employment generation because a farmer who spent more money on agriculture enterprise had good employment comparatively with other farmer who spent more money on his personal habits (alcohol, gutka, beedi and cigarette). The planning orientation was very crucial for any enterprise in selection of seed, fertilizers and package of practices, the production orientation was to taking up the paddy enterprise by conventional method or by scientific method? and market orientation was selling the produce and buying requirements for the enterprise had great influence on employment generation.

The farmer with good achievement motivation, who sets right goals for his enterprise, looked for different ways of achieving them and that internal drive for accomplishing his goals drove him towards keeping himself engaged in his enterprise more than other farmer who did not have this attribute, in such a way this character had a great relationship with employment generation. The farmers' information seeking behaviour has a key role in generation of employment among the farming community. The farmer who was informed

about scientific information on package of practices and availability of information to tackle with pest, disease and other constraints had better employment than the other farmer.

The farmers risk taking behaviour kept him involved in his enterprises more because it involved with risk of income loss which might have led him to indebtedness and even some times leads to fatal situation which was witnessed in recent times hence this variable has showed relationship with employment generation. Decision making another important attribute for any individual especially for the farmer because his livelihood occupations are mainly dependent on many extraneous factors and at times of crisis he should be a good decision maker hence, choosing a right alternative at right time helps in overcome any eventualities in his enterprise. Knowledge on livestock and crop enterprises showed impact over employment because the farmers who had knowledge about the different practices of paddy cultivation increased their involvement in the enterprise.

Innovativeness was an important attribute of farmers in the sample area which showed direct effect on employment generation because new approaches in taking up the enterprise greatly increased their involvement in enterprise.

Table 2: Relationship between socio-economic and psychological characteristics with the Employment generation by Agricultural Enterprises

Independent Variable	r-value
Social status	-0.015
Experience in livestock and crop enterprises	0.187
Land holding	0.401**
Social participation	-0.095
Herd size	0.021
Market facilities	-0.192
Material possession	0.175
Expenditure Pattern	0.280**
Knowledge on livestock and crop enterprises	0.213*
Planning orientation	0.484**
Production orientation	0.411**
Market orientation	0.377**
Achievement motivation	0.367**
Economic orientation	0.075
Information Seeking behaviour	0.394**
Risk orientation	0.430**
Credit orientation	0.316**
Decision making	0.501**
Innovativeness	0.397**

It could be concluded that Land holding, Expenditure Pattern, Planning orientation, Production orientation, Market orientation, Achievement motivation, Information Seeking behavior, Risk orientation, Credit orientation, Decision making, innovativeness and Knowledge on livestock and crop enterprises showed significant relationship with the variable Employment generation.

The results of multiple linear regression analysis for prediction of selected socio-economic and psychological characteristics that contribute to the variation in the extent of employment generation were furnished in the Table 3. The variables namely planning orientation and decision making were found to be having positive and significant regression coefficients at 1 per cent level of probability, while the remaining all other variables like social status, experience in livestock and crop enterprises, social participation, market facilities, material possession, expenditure pattern, production orientation, market orientation, achievement motivation,

Table 3: Multiple Linear Regression analysis of independent variables with Employment generation by Agricultural Enterprises

Variable	Regression Coefficient (B)	t-value
Social status	7.148	0.53
Experience in livestock and crop enterprises	0.068	0.017
Land holding	107.972	1.457
Social participation	-38.027	-0.306
Herd size	2.545	1.099
Market facilities	-95.467	-1.245
Material possession	-7.225	-1.465
Expenditure Pattern	-0.299	-0.39
Knowledge on livestock and crop enterprises	-3.187	-0.497
Planning orientation	178.152	3.065**
Production orientation	-79.714	-1.187
Market orientation	-67.486	-1.272
Achievement motivation	-20.402	-0.667
Economic orientation	1.89	0.375
Information Seeking behaviour	-4.836	-0.577
Risk orientation	14.09	0.401
Credit orientation	-71.076	-1.216
Decision making	109.893	2.552**
Innovativeness	1.23	0.072

R² = 0.437 F=2.776
 * Significant at 0.05 level of probability
 ** Significant at 0.01 level of probability

Table 4: Step down multiple regression analysis for predicting the influence of selected independent variables on employment generation by Agricultural Enterprise

Variable	Regression Coefficient (B)	t
Material Possession	-6.223	-2.348**
Planning orientation	114.56	2.954**
Market orientation	-112.982	-2.923**
Decision making	91.233	3.139**

* Significant at 0.05 level of probability $R^2 = 35.10$

** Significant at 0.01 level of probability $F = 11.21$

economic orientation, information Seeking behaviour, risk taking behaviour, credit orientation, and innovativeness were found to have non-significant. The value of R^2 (0.437) indicated that all the independent variables put together explained the variation in the employment generation to the extent of 44.00 per cent. The computed F value (2.776) was found to be significant. Based on the R^2 and the test, the null hypothesis was rejected and concluded that the data supported the original proposition that the score on 17 independent variables explained a significant amount of variation in extent of employment generation.

Table 4 presented Step down regression analysis which identified the independent variables that significantly accounted for variation in employment generation of farmer. A cursory look at the table 4 indicated that among farmers, four variables explained

35.00 per cent variation in employment generation of the farmers. The variable planning orientation and decision making were positively and significant at 1 per cent level of probability where as material possession and market orientation had significant contribution ($p \leq 0.01$). This implied that these four variables were crucial in explaining the variation in the employment generation of farmers.

CONCLUSION

The results revealed that the farmers who were depending on paddy cultivation in the sample area provided full employment i.e. 381 days. The farmers who depended on paddy cultivation along with dairy enterprise generated 912 man days of employment, the paddy cultivation with sheep and goat enterprise generated 815 man days and paddy with pig enterprise created 492 man days of employment in the study area were fully employed. The results also revealed that the independent variables like Land holding, Expenditure Pattern, Planning orientation, Production orientation, Market orientation, Achievement motivation, Information Seeking behavior, Risk orientation, Credit orientation, Decision making, innovativeness and Knowledge on livestock and crop enterprises were need to be considered for providing sufficient employment to the farming community.

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REFERENCES

- Harish BG, Nagaraj N, Chandrakanth MG, Srikantha Murthy PS, Chengappa PG, Basavaraj G. (2011). Impacts and implications of MGNREGA on labour supply and income generation for agriculture in central dry zone of Karnataka. *Agricultural Economics Research Review*. **24**.
- Nagaratna Biradar, Monica Desai, Manjunath L, Doddamani MT (2013). Assessing contribution of livestock to the livelihood of farmers of Western Maharashtra. *J. of Human Ecology*. **41** (2) : 107-112.
- Niyathi N (1991). District planning for tackling poverty and unemployment. *Kurukshetra, A Journal on Rural Development*, **34** (5) :29-34
- NSS 66th round quinquennial survey 2009-10.
- Planning commission (GOI) December 2011. Report of the working group on employment, planning & policy for the twelfth five year plan (2012-2017). Government of India Labour, Employment & Manpower (LEM) Division, New Delhi.
- Shekhawat SS, Sheikh AS, Sharma SK (2011). Impact of employment generation programmes in terms of providing employment to the beneficiaries. *J. of Progressive Agriculture*. **2** (2).
- Satyanarayana CH (2010). Employment generation through livestock and crop enterprises as a means of livelihood. *African Journal of Livestock Extension*, **8**, 2010.