

## Impact of Green Army Labour Bank on Standard of Living of Farm Labourers

M. NITHISH BABU, M. S. NATARAJU AND M. T. LAKSHMINARAYAN

Department of Agricultural Extension, College of Agriculture, UAS, GKVK, Bangalore - 560 065

E-mail : amogharaju@yahoo.com

### ABSTRACT

The present study was conducted in Waddakanchery Block of Thrissur District in Kerala state during 2016-2017 to analyze the impact of green army labour bank on standard of living of its members and non members. A sample of 40 green army members and 40 non-members were selected for the study to know the standard of living of its members in comparison with the non- members. Significant differences is observed between the green army members and non- members with respect to annual income, social status, value addition in education and investment on assets, savings and functions at one per cent probability. The chi-square analysis reveals that there is highly significant difference between non- members and members of green army in respect of standard of living. The important reasons for the success of green army as perceived by the members were mode of payment (salary), followed by training received on improved cultivation practices and operation of farm machinery and equipment. The important suggestions for effective functioning of green army as perceived by its members are providing regular job opportunities during off season and extending the green army activities to various crops etc.

*Keywords* : Standard of living, green army, labour bank, success

GREEN army is an initiative taken up by the Kerala Agricultural University through Food Security Army (FSA). The University has conceptualized the need for an efficient work force for the state in achieving food security and is able to form various Labour bank or Labour Army in different parts of the state. Green Army Labour Bank is such an organization formed as a self-sustaining group of skilled force fostered by the local body of Wadakkanchery Block in Thrissur district during 2008. The concept is equipped with modern farm techniques, interventions, and farm machineries.

The green army has moved ahead with the introduction of machines and employing the farm labourers trained by the Kerala Agricultural University. Gradually the green army developed a large pool of skilled workers both men and women, who could offer a package of service starting from preparing the seedlings to transplanting, weeding, and harvesting. The green army or a labour bank thus managed to green large tracts of land. It was finally registered in 2010 with both men and women as its members, but largely dominated by women. It provided labourers with social security and other employment benefits. The important feature of the

green army was that it did not have a wage differential between men and women.

Green Army Wadakkanchery Block Labour Bank (GAWBLB) is a total solution for the labour shortage and rejuvenates the paddy cultivation in Wadakkanchery Block. It has adequately skilled and committed labour force trained in agricultural mechanization. It is not just a model for profit making but it is a social venture which helps the farming community by boosting up paddy cultivation and contributing to food security. This model can be scaled up with social responsibility and implemented with the support of institutional intervention (Sendilkumar *et al.*, 2014). It also aims at bringing back the farm labourers who migrated to other profitable fields, with enough benefits to augment the paddy production. With this background, the present study was carried out with the following specific objectives:

1. To know the personal, socio psychological and communication characteristics of non- members and members of green army
2. To analyse the standard of living of green army members and non members based on their standard of living

3. To identify the reasons for the success of green army as perceived its members
4. To document the suggestion of members for effective functioning of green army

#### METHODOLOGY

The study was conducted in Waddakanchery Block of Thrissur district in Kerala state during 2016-2017. Wadakkanchery Block was purposively selected for the study because in this block the green army labour bank initiatives was taken. A sample of 40 green army members (farm laborers) and 40 non-members (farm laborers) were selected for the study for comparing the standard of living of green army members in comparison with the non-members.

Standard of living is operationally defined as the 'degree of enhancement in terms of annual income, employment generation, social status, and investment on assets, investment on savings and investment on social functions among the green army members (farm labourers)'. The scale developed by Vinaykumar (2008) was used in the present study to measure the standard of living of both green army members and non members. The components of standard of living consisted of annual income, employment generation, social status, value addition in education, food consumption pattern, health status, investment on assets and investment on savings.

The raw score of different dimensions of standard of living *viz.*, annual income, employment generation, social status, value addition to education, amount spent on food consumption, health status, investment on assets, investment on savings and investment on social functions were converted into standard score by using the formula:

$$\text{Standard score} = \left[ \frac{\text{Individual raw score} - \text{Mean raw score}}{\text{Standard deviation}} \right] \times 10 + 50$$

The mean standard score of all the dimensions of standard of living was worked out by using the formula:

$$\text{Mean standard score of standard of living} = \frac{\text{Sum of standard score of different dimensions}}{9}$$

Based on the total score obtained by green army members and non members, they were classified into low, medium and high level of standard of living using mean and half standard deviation as measure of check.

Information regarding 14 personal, socio-psychological and communication characteristics of green army members and non members were measured using suitable scales. Information were also collected from green army members regarding the reasons for success of green army and suggestions for effective functioning of green army. The collected data were analyzed using, percentage, mean, standard deviation, chi-square test and paired 't' test.

#### RESULTS AND DISCUSSION

##### **Personal, socio-psychological and communication characteristics of non-members and members of green army**

It is observed from Table I that a majority of non-members were of middle age (60.00%) having small size family (90.00%) and low level of cosmopolitaness (57.50%), social participation (55.00%), mass media participation (52.50%), extension agency contact (77.50%), and extension participation (75.00%). All the non-members interviewed were marginal farmers (100.00%), while a large number of non-members were having low level of education (47.50%), cosmopolitaness (57.50%), achievement motivation (50.00%), and fatalism-scientism (37.50%). It is also observed from Table I that an equal number of non-members (37.50% each) were having low and medium level of aspiration. It can be inferred that most of the non-members were having low to medium level of personal, socio-psychological and communication characteristics.

Table I also reveals that a majority of green army members were of middle aged (57.50%) having small family size (82.50%), while 85.00 per cent of the green army members were marginal farmers (85.00%). A larger number of green army members were having medium level of aspiration (37.50%) and medium level of education (47.50%), source of information (50.00%), and fatalism-scientism (40.00%). It is also seen from Table I that more number of green army members were having high level of institutional

TABLE I  
*Personal, socio-psychological and communication characteristics of non members  
 and members of green army*

Sl. No.	Characteristics	Category	Green army non-members (n=40)		Green army members (n=40)	
			Number	Per cent	Number	Per cent
1.	Age	Young	6	15.00	5	12.50
		Middle	24	60.00	23	57.50
		Old	10	25.00	12	30.00
2.	Education	Low	19	47.50	10	25.00
		Medium	12	30.00	19	47.50
		High	9	22.50	11	27.50
3.	Size of family	Small	36	90.00	33	82.50
		Large	4	10.00	7	17.50
4.	Land holding	Marginal farmers	40	100.00	34	85.00
		Small farmers	0	-	6	15.00
5.	Source of information	Low	16	40.00	18	45.00
		Medium	20	50.00	20	50.00
		High	4	10.00	2	5.00
6.	Institutional linkage	Low	19	47.50	10	25.00
		Medium	13	32.50	9	22.50
		High	8	20.00	21	52.50
7.	Cosmopolitaness	Low	23	57.50	8	20.00
		Medium	8	20.00	11	27.50
		High	9	22.50	21	52.50
8.	Achievement motivation	Low	20	50.00	3	7.50
		Medium	16	40.00	14	35.00
		High	4	10.00	23	57.50
9.	Aspiration level	Low	15	37.50	8	20.00
		Medium	15	37.50	17	42.50
		High	10	25.00	15	37.50
10.	Fatalism-scientism	Low	15	37.50	10	25.00
		Medium	8	20.00	16	40.00
		High	17	42.50	14	35.00
11.	Social participation	Low	22	55.00	5	12.50
		Medium	13	32.50	8	20.00
		High	5	12.50	27	67.50
12.	Mass media participation	Low	21	52.50	6	15.00
		Medium	9	22.50	16	40.00
		High	10	25.00	18	45.00
13.	Extension agency contact	Low	31	77.50	6	15.00
		Medium	8	20.00	14	35.00
		High	1	2.50	20	50.00
14.	Extension participation	Low	30	75.00	1	2.50
		Medium	6	15.00	9	22.50
		High	4	10.00	30	75.00

linkage (52.50%), cosmopolitaness (52.50%), achievement motivation (57.50%), social participation (67.50%), mass media participation (45.00%), extension agency contact (50.00%) and extension participation (75.00%). It can be concluded that a large number of green army members were having high level of personal, socio-psychological and communication characteristics.

More or less similar findings were reported by Gayathridevi (2000), Gaiha *et al.* (2010), Jayanta (2012), Bhuvana (2013), Sandeep (2013), Darsana and Ravichandran (2014) and Sachu (2015).

### Distribution of green army members and non-members based on their standard of living

Table II reveals that 47.50 per cent of the non-members were belonging to low level of standard of living, while 40.00 and 12.50 per cent of the non-members were belonging to medium and high level of standard of living, respectively. The results in Table II also reveals that a majority (57.50%) of the green army members were belonging to high level of standard of living, while 37.50 and five per cent of the members were belonging to medium and low level of standard of living, respectively. The chi-square analysis reveals a highly significant difference between non-members and members of green army with respect to standard of living.

TABLE II

#### *Distribution of green army non- members and members of green army based on their standard of living*

Level of Standard of living	Green army non-members (n=40)		Green army members (n=40)	
	Number	Per cent	Number	Per cent
Low	19	47.50	2	5.00
Medium	16	40.00	15	37.50
High	5	12.50	23	57.50
Mean	64.77	-	78.33	-
Standard deviation	13.08	-	8.04	-
Chi – square test value	25.37		**	

\*\* Significant at 1% level

The results reveals that a majority of the green army members (57.50%) had high level of standard of living, whereas only 12.50 per cent of the non-members were in the category of high level of standard of living. It is also noticed from the findings that only five per cent of the members were in low level of standard of living, whereas 47.50 per cent of non-members were in low level of standard of living. The green army has provided assured job opportunities, reasonable wage and increased income to its members, hence there is a highly significant difference in the standard of living between non-members and members of green army. The results were in conformation with the findings of Vinay Kumar (2008) and Jayanta (2012).

### Mean values of different dimensions of standard of living of green army members and non-members

It is evident from Table III that the mean values of the annual income (₹ 75912 and ₹ 111648), social status (12.97 and 17.92 score), value addition in education (21.02 and 28.07 score) food consumption pattern (₹ 3118 and ₹ 3250) health status (19.18 and

TABLE III

#### *Mean value of different dimensions of standard of living of green army members and non members*

Dimensions of Standard of living	Mean values		't' value
	Green army non-members (n=40)	Green army members (n=40)	
Annual income (Rs)	75912.00	111648.00	4.41 **
Employment generation (mandays)	205.40	198.45	0.63 NS
Social status (score)	12.97	17.92	6.67 **
Value addition in education (score)	21.02	28.07	7.32 **
Food consumption pattern (Rs)	3118.00	3250.00	0.67 NS
Health status (score)	19.18	19.35	0.15 NS
Investment on assets (Rs)	20344.00	42401.00	4.23 **
Investment on savings (Rs)	25513.00	40284.00	2.89 **
Investment on social functions (Rs)	3102.00	6500.00	5.52 **

NS= Non-significant; \*Significant at 5 per cent level; \*\*Significant at 1 per cent level.

19.53 score), investment on assets (₹ 20,344 and ₹ 42401), investment on savings (₹ 25,513 and ₹ 40284) and investment on social functions (₹ 3102 and ₹ 6500) are comparatively higher in case of green army members compared to the non-members, respectively. Significant differences is observed between the green army members and non- members in respect to annual income, social status, value addition in education and investment on assets, savings and functions at one per cent probability.

Data subjected for statistical test as shown in Table III reveals the enhancement in the mean value of standard of living among beneficiaries and non-beneficiaries of green army in respect of the dimensions, such as annual income, social status, value addition in education, investment on assets, investment in savings and investment on social functions was found to be significant at one per cent level. The explanation given for the results of Table II also holds good here. The above results get supported by the findings reported by Vinay Kumar (2008) and Jayanta (2012).

#### Reasons for the success of green army as perceived by its members

The reasons for the success of green army as perceived by its members were mode of payment of (salary) (Rank I), followed by training received on improved cultivation practices and operation farm machinery and equipment (Rank II), better skills in operating farm machinery and equipment (Rank III), increased social recognition of the members (Rank IV), good group synergy among the members (Rank V) and strict time norms of the green army (Rank VI) (Table IV). The above reasons has made the green army successful and popular among the farm labours in Wadakkanchery Block of Thrissur district.

#### Suggestions of members for effective functioning of green army

Cent per cent of the green army members were of the opinion that regular job opportunities should be provided during off season (Rank I), followed by extending the activities to various crops (Rank II), taking up cultivation in leased land (Rank III), timely availability of spare parts (Rank IV), continuous or regular training should be given on improved

TABLE IV  
*Reasons for success of green army as perceived by its members* (n=40)

Reason*	Green army non-members		
	No.	Per cent	Rank
Mode of payment through salary	40	100.00	I
Received training on improved cultivation practices and operation of farm machinery and equipment	36	90.00	II
Green army members are having better skills on operation of farm machinery and equipment	35	87.50	III
Increased social recognition of the members	33	82.50	IV
Good group synergy	30	75.00	V
Strict time norms	28	70.00	VI

\*Multiple responses

TABLE V  
*Suggestions of members for effective functioning of green army* (n=40)

Suggestions*	Green army non-members		
	No.	Per cent	Rank
Providing regular job opportunities during off season	40	100.00	I
Extending the activities to other crops.	37	92.50	II
Taking up cultivation in leased land.	32	80.00	III
Timely availability of spare parts of machineries.	29	72.50	IV
Continuous or regular training should be given on improved cultivation practices	27	67.50	V
Increase group synergy among the members	22	55.00	VI

\*Multiple responses

cultivation practices (Rank V) and increase the group synergy among the members (Rank VI) (Table V). The concerned authorities may consider these suggestions put forth by the members of the green army for its effective functioning.

The results reveals that a majority of the green army members (57.50%) had high level of standard of living, whereas only 12.50 per cent of the non-members were in the category of high standard of living. The chi-square analysis reveals a highly significant difference between non-members and members of green army with respect to the standard of living. Hence, it can be concluded from the results of the study that the green army has improved the standard of living of its members (farm labourers). The major suggestions of the green army members were providing regular job opportunities during off season, extending the activities to various crops and taking up cultivation in leased land.

#### REFERENCES

- BHUVANA, N., 2013, Impact of MGNREGA programme on women beneficiaries in Bangalore Rural District. *M.Sc. (Agri.) Thesis* (Unpub.), Univ. Agric. Sci., Bangalore.
- DARSANA, S. AND RAVICHANDRAN, V., 2014, Green Army - A Labour Bank Experiment in Kerala. *J. Extn. Edu.*, **26** (4) : 5344 - 5348.
- GAIHA, R., SHANKAR, S. AND RAGHBENDRA JHA, 2010, Targeting accuracy of the NREGA; Evidence from Rajasthan, Andhra Pradesh, and Maharashtra. *A SAARC working paper*, pp. : 1 - 25.
- GAYATHRIDEVI, S. P., 2000, Impact of selected rural development programmes on self-employment of rural women. *M.Sc. (Agri.) Thesis* (Unpub.), Univ. Agric. Sci., Dharwad.
- JAYANTA, R., 2012, Impact analysis of Mahatma Gandhi National Rural Employment Guarantee Programme in Dhalai district of Tripura. *Ph.D. Thesis* (Unpub.), Univ. Agric. Sci., Bangalore.
- SACHU, Z. Y., 2015, Impact of Green Army Labour Bank on the welfare of agricultural labourers. *M.Sc. (Agri.) Thesis* (Unpub.), Kerala Agricultural University, Thrissur.
- SANDEEP R., 2013, A critical analysis of Joint Forest Planning and Management in improving livelihood status of Village Forest Committee members in Chickmagalur District of Karnataka State. *Ph.D. Thesis* (Unpub.), Univ. Agric. Sci., Bengaluru.
- SENDILKUMAR. R., SHYAM BHASKAR, N. C. AND ISRAEL THOMAS, 2014, Green Army Wadakkanchery Block Labour Bank: A Servqual Analysis. *Inte. J. Extn. Edu.*, **10** : 120 - 126
- VINAY KUMAR. R., 2008, Impact of Rural Bio Resource Complex on standard of living of its stake holders in Karnataka. *Ph.D. Thesis* (Unpub.), Univ. Agric. Sci., Bengaluru.

(Received : August, 2017 Accepted : February, 2018)