

Empowerment of Farmers through GALASA Programme- A Journey for Sustainable Agriculture Development

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ABSTRACT

Empowerment is being the slogan since ninth plan and encouraging group formation. Empowerment is defined a collective undertaking, involving both individual and collective action. Group farming is a collective action introduced by Kerala Government in 1989. There are mainly two vital processes in the empowerment viz., social mobilization and collective action embedded in the GALASA Programmes (Group Approach for Locally Adapted and sustainable Agriculture). Hence, an attempt was made to study the empowerment dynamics of farmers before and after joining in the programme. Sixty farmers belonged to two farmers groups were selected from Thrissur district by applying simple random sampling. All the major components were measured before and after joining of farmers in the group. It was noticed that considerable enhancement in the empowerment dimensions of all the major components (0.30-0.45 to 0.35 to 0.71). The Empowerment Dynamic Index (EDI) was computed for the situation before and after joining of farmers in the group (0.24 to 0.42). Hence, it could be concluded that GALASA programme played a significant role in the empowerment of rice farmers and set up a stage for sustainable development of paddy cultivation in the state.

Key words: Dynamics; Empowerment; GALASA Programmes; Dynamics of farmers; Dynamic Index (EDI);

Empowerment is being the slogan since 9th plan and encouraging group formation. FAO has emphasized on strengthening and motivating the farmers of the grass root level by inspiring them to think critically and take group decision and equal participation. Group farming is a collective action introduced by Kerala Government in 1989 which is an integrated endeavor to combine resources, technology and management of input to overcome economic, technological and institutional constraints of low productivity in rice cultivation. Bradley *et.al* (1999) defined empowerment is a collective undertaking, involving both individual and collective action. There are mainly two vital processes in the empowerment viz., social mobilization and collective action embedded in the GALASA (*Group Approach for Locally Adapted and sustainable Agriculture*) programme, which aims at eliminating the technological, management and marketing constraints through empowerment process and thereby it become assumes greater importance for the sustainable development of agriculture. Hence, an attempt was

made to study the empowerment dynamics of farmers before and after joining to the GALASA programme.

METHODOLOGY

The study was carried out in Alagappanagar Grama Panchayath of Thrissur district of Kerala with a sample size of 60 selected from the two farmers group under the GALASA program by applying simple proportionate random sampling method. Ex-post research design was followed to study the empowerment dimension. The empowerment dynamics was studied by considering the major components (Knowledge Empowerment, Psychological Empowerment, Social Empowerment, Economic, Empowerment Political Empowerment and Creativity Empowerment) selected from the jury opinion. All the major components were measured with the help of identified subcomponents. Each subcomponents listed were measured against the identified items, collected through the process of review of relevant literature, focused discussion with the officials, experts experienced farmers and Peer groups.

One score was given against each item and thus maximum and minimum score would be 5 and 1, respectively. The obtained score was then categorized as highly empowered (4-5), empowered (3-4), moderately empowered (2-3), little empowered (1-2) and very little empowered (0-1). Like wise responses were collected from the respondents for the two occasions such as before and after joining of membership to the GALASA programme by using structured interview schedule and focus group discussion. The obtained data were analysed using simple percentage analysis, mean, t test and index for meaningful interpretation. The Empowerment dynamics index was calculated by using the following formula.

$$EDI = \frac{KEI + PsyEI + SEI + EEI + PEI + CEI}{6}$$

Where

EDI = Empowerment Dynamic Index,

KEI = Knowledge empowerment index,

PsyEI = Psychological empowerment index,

SEI = Sociological empowerment index

EEI = Economic empowerment index,

PEI = Political empowerment index

CEI = Creativity empowerment Index

RESULTS AND DISCUSSION

Knowledge empowerment : The knowledge empowerment was analysed in terms of awareness of information, knowledge and skills possessed by the respondents before and after joining to the GALASA programme presented in Table 1.

From the Table 1 it is noticed that adoption of integrated farm management practices (IPM, INM and IWM) by the respondents have been increased from 1.8, 1.9, and 2.2 to 3.2, 3.4, and 3.0 respectively after joining the group. Knowledge on agricultural schemes operated by Krishi bhavan has been drastically increased from 2.1 to 3.6. All the respondents (100%) have responded positively when asked questions regarding knowledge on the use of machinery and equipments after joining the group. Use of agricultural machinery and equipments (3.80), knowledge on agricultural schemes operated by Krishi bhavan (3.60), adoption of INM practices (3.40) and adoption of IPM practices (3.20) have been contributed heavily to the knowledge empowerment dimension.

Table 1. Knowledge empowerment of farmers in GALASA Programme (N=60)

Knowledge empowerment components	Mean Scores		T test value
	Before Joining	After Joining	
Adoption of IPM practices	1.8	3.2	5.2063**
Adoption of INM practices	1.9	3.4	1.0131
Adoption of IWM practices	2.2	3.0	8.3649**
Use of machineries & equipments	1.3	3.8	3.0612**
Knowledge on value addition	2.0	3.0	8.1276**
Knowledge on account keeping	2.3	2.8	1.0427
Knowledge on agril. prog. of Krishi bhavan	2.1	3.6	8.1312**
Information about human right	2.3	2.9	3.0132**
Total mean score	18	25	
Overall mean Score	2.3	3.1	

t value (1% significance) = 2.6617

It is evident that mean scores of all the dimensions of empowerment were increased greatly after joining of farmers to the GALASA programme. The major reason for knowledge empowerment was mainly due to their participation in the training programs conducted by various development agencies in the study area. It has been reported by Ashokhan (2006)

The T-test showed a significant difference in the mean scores of subcomponents viz., adoption of IPM and IWM practices, use machinery and equipments, knowledge on value addition, knowledge on agricultural programmes of Krishi bhavan and information about human right.

Hence it may conclude that GALASA Programme have played a significant role in the enhancement on the knowledge dimension of farmers.

Psychological empowerment: The psychological empowerment of the farmers in the GALASA Programme was assessed in terms of change in courage, decision making quality, risk taking ability etc. and furnished in Table 2.

Table 2 reveals that there has been considerable improvement in the psychological attributes of the

respondents. The confidence level and courage of the respondents in farming (paddy cultivation) has been increased considerably after joining to the GALASA programme, evident from mean scores 1.8 to 3.6 and 2.0 to 3.8 respectively.

Table 2. Psychological empowerment of farmers in GALASA Programme (N=60)

Psychological empowerment components	Mean Scores		T test value
	Before joining	After joining	
Confidence	1.8	3.6	4.3567**
Decision making quality	2.1	3.5	2.2185*
Risk taking ability	2.2	3.5	3.3242**
Courage	2.0	3.8	7.8198**
Motivation in farming	1.8	4.0	9.2541**
Positive attitude	2.2	3.1	1.5678
Self-esteem	2.3	3.2	2.5740**
Total mean score	14.4	24.7	
Overall mean score	2.1	3.5	

t value (1% significance) = 2.6617

Remarkable improvement in motivation towards farming was noticed (mean score from 1.8 to 4.0). This was mainly due to various encouraging policies of the State Government and involvement of other related agencies in the development of agriculture. The risk taking ability of the members has also been increased. With regard to feeling of positive attitude and self-esteem and decision making ability, there has been an outstanding improvement, were noticed. The feeling of positive attitude and self-esteem has been increased from the mean score of 2.2 and 2.3 to 3.1 and 3.0 respectively. The T-test showed a significant difference in the mean scores on confidence, risk taking ability, courage, motivation and self esteem. This significance change might be due to the positive impact of group farming practices followed in the study area.

Social empowerment : The social empowerment was studied in terms of freeness to work with group members, participation in group activities, involvement in the decision making process, participation in gramasabha meetings, free interaction with family members and outsiders, team spirit and leadership quality. The results are depicted in the Table 3.

From the Table 3 it is evident that the contact with institutions and linkage with development departments by the respondents had shown remarkable improvement.

After joining to the GALASA programme, the mean scores for the above said subcomponents were increased from 2.1 to 4 and 3.9 respectively. Regarding freeness to work with group members, there was an increase in mean score (2.3 to 3.4) noticed. Similar findings was reported by *Karpagam (2009)*

Table 3. Social empowerment of farmers in GALASA Programme (N=60)

Sociological empowerment components	Mean Scores		T test value
	Before joining	After joining	
Free to work with group members	2.3	3.4	6.4136**
Participation in group activities	2.6	3.0	2.4269**
Involvement in decision making	2.7	3.4	7.5136**
Attendance in grama sabha meeting	2.7	2.8	0.1094
Free interaction with family members & outsiders	3.4	3.5	0.0513
Team spirit	2.5	3.2	1.6399
Leadership quality	2.6	3.1	3.9637**
Group consensus to solve problem	2.4	3.2	8.2600**
Developing institutional contact	2.1	4.0	9.2419**
Linkage with developing departments	2.1	3.9	3.3441**
Group marketing skill	1.8	3.1	3.9292**
Developing skill to solve conflict	2.3	2.9	4.5603**
Total mean score	29.5	39.5	
Overall mean score	2.5	3.3	

t value (1% significance) = 2.6617

In the case of participation in group activities and involvement in decision making process, considerable improvement in the mean scores (2.6, 2.7: 3.0, 3.4) has been observed. The principle, philosophy and nature of the GALASA programme itself support the reason for enhancement in the social empowerment.

It can be seen that team spirit and leadership quality of the respondents were improved and the other components such as free interactions of members of the group with other persons or friends, neighbours etc and attendance in Gramasabha meetings were remains more or less same even after joining to the programme.

The T-test showed that significant difference in

the mean scores on the components like freeness to work with group members, participation in group activities, involvement in decision making, leadership quality and group consensus to solve problem, developing institutional contact and linkage with developing departments, group marketing skill and developing skill to solve conflict.

Table 4. Economic empowerment of farmers in GALASA Programme (N=60)

Economic empowerment components	Mean Scores		T test value
	Before Joining	After Joining	
Increased income due to yield obtaining	2.3	3.3	1.8342
Saving money	1.5	2.4	4.3848**
Investments	1.2	1.7	6.5988**
Availing agriculture loans	1.2	2.3	2.0157*
Financial management skill	2.4	3.0	1.1696
Extent of dependency on money lenders	1.0	1.0	NA
Availing the facilities of KCCS	1.4	1.8	0.0030
Availing personal insurance	1.5	1.8	0.0002
Availing family insurance	1.0	1.0	NA
Availing crop insurance	1.1	2.7	3.7410**
Purchase of inputs of farming	1.7	3.5	2.7519**
Total Mean Score	16.3	24.5	
Overall mean score	1.48	2.2	

t value (1% significance) = 2.661

Economic empowerment: The economic empowerment of the farmer members was studied based on the selected parameters like income, savings habit, investments, financial management skill, extent of dependency on money lenders, purchasing of input of farming etc. and given in Table 4.

It is seen from the Table 4 income of the respondents have been increased, which might due to the increase in the yield obtained. Regarding the purchase of inputs for farming, respondents have gained increased mean score (3.5) especially after joining to the group, because of the reason that the required farm inputs were provided by the Krishi bhavan through padasekhara samithies at a subsidized cost. With respect to availing of agricultural loans, farmers have been empowered considerably (mean score 1.2 to 2.3), due to reason that, PACS are providing interest free loans to the GALASA members. The savings of the members have slightly increased (2.4) inspite of poor return from farming. Increased mean score (2.7) was seen in the

case of crop insurance, due to reason that farmers have availed this facility being the member of the GALASA programme.

The T-test computed also support the mean score obtained and shown significant difference in saving of money, investments, availing crop insurance and purchasing inputs.

Table 5. Political empowerment of farmers in GALASA Programme (N=60)

Political empowerment components	Mean Scores		T test value
	Before Joining	After Joining	
Membership in the social organizations	1.7	1.8	0.0896
Position in the political parties	1.3	1.4	1.0000
Freedom of expressing ideas in politics	1.4	1.5	0.0327
Conflict management	1.7	2.1	9.3474**
Total mean score	6.1	6.9	
Overall mean score	1.5	1.7	

t value (1% significance) = 2.6617

Political Empowerment: The political empowerment studied with variables like membership in social organization, position assumed in the political party, freedom of expressing ideas in politics and conflict management and shown in Table 5.

Table 5 reveals that the mean scores obtained by the respondents in political empowerment components, before and after the GALASA programme seems to more or less same. A few respondents were held membership in political parties. With respect to conflict management, the average score obtained by the respondents was increased by 0.4. Rest of other variables, such as membership in social organization, position in the political parties and freedom of expressing ideas in politics, a slight improvement has been recorded.

The T-test showed a significant difference in the mean score obtained on Conflict management. The GALASA programme has provides greater scope on conflict management and hence it showed a significance change on this dimension.

Creativity empowerment : The subcomponents such as generation of new ideas, orientation towards crisis management were studied to analyze the creativity empowerment component and presented in Table 6.

Table 6 reveals that the mean scores obtained by the respondents have not been changed considerably

even after joining the GALASA programme. With respect to orientation towards crisis management, the average score was increased from 2.1 to 2.8. The change in the mean score was mainly because of the nature of paddy cultivation, and subject to prone various kinds of risk. The T-test did not shown significant difference in the mean scores on any of the empowerment variables under this dimension.

Table 6. Creativity empowerment of farmers in GALASA Programme (N=60)

S. No.	Empowerment variables	Mean Scores		T test value
		Before Joining	After Joining	
1	Generation of novel ideas	1.6	1.7	0.0183
2	Orientation towards crisis management	2.1	2.8	1.8151
	Total mean score	3.7	4.5	
	Overall mean score	1.9	2.3	

t value (1% significance) = 2.6617

Empowerment Dynamics Index (EDI): Empowerment Dynamics Index were computed by inclusive of major components such as Knowledge Empowerment, Psychological Empowerment, Social Empowerment, Economic Empowerment, Political Empowerment and Creativity Empowerment and given in Table 7.

It is evident from the Table 7 there was only 18 per cent increase in the empowerment dynamics index. This might be due to cumulative effect of empowerment in all components of empowerment. The increase in EDI was reported for the psychological empowerment component (30 per cent) followed by knowledge empowerment component (18%), social empowerment

component (17%), and economic empowerment component (15%), creativity empowerment component (8%) and political empowerment component (4%). Hence it is concluded that relatively considerable enhancement has noticed in all the dimensions of empowerment studied.

Table 7. Empowerment Dynamics Index of farmers in the GALASA Programme (N=60)

Dimensions of empowerment	Index	
	Before Joining	After Joining
Knowledge Empowerment Index (KEI)	0.45	0.63
Psychological Empowerment Index (PsyEI)	0.41	0.71
Social Empowerment Index (SEI)	0.49	0.66
Economic Empowerment Index (EEI)	0.30	0.45
Political Empowerment Index (PEI)	0.31	0.35
Creativity Empowerment Index (CEI)	0.37	0.45
Empowerment Dynamics Index (EDI)	0.24	0.42

CONCLUSION

Therefore it may possible to conclude that GALASA programme has provides immense scope for the empowerment of farmers in all the dimensions and thereby assures sustainable rice production in the state and ensuring food security. More of team building and leadership management programme could be designed to suit for the farmers interest group/commodity interest group/self help group to nurture the empowerment. Exclusive training module incorporating soft skills on the light of empowerment dimensions of farmers could be developed to meet the challenges of farming.

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REFERENCES

- Ashokhan, M. (2006). A study on Empowerment of SHG operated in selected district of TamilNadu –An empirical study, Ph.D thesis (unpub.), Dept of AE&RS, TNAU, Coimbatore.
- Bradley, L.; Kirkman, Kevin; B. Lowe and Diane. P. Young (1999). High-performance work organizations, definition, practices and an annotated bibliography, Centre for creative Leadership, North Carolina.
- Karpagam, C. (2009). Social dynamics of farmers in drip irrigation system of selected crops-An empirical study. Ph.D thesis (unpub.), Dept of AE&RS, TNAU, Coimbatore.

