

## Accomplishing Food Security through Community Action

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### ABSTRACT

*Exclusive programmes for ensuring food security involve participation of several stakeholders, which is necessarily a function of their comprehensive awareness on the concept of food security and the concerns of the community regarding accomplishment of food security. Food security in turn has several dimensions as understood from the vast literature available in this regard. Four important dimensions viz. production dimension; distribution dimension; nutrition dimension and socio economic dimensions have been delineated. This study tries to assess and compare the concerns of different stakeholders on the of the community regarding accomplishment of food security. The study was conducted in twenty panchayats selected randomly from Thrissur district of Kerala and data were collected from rice farmers, extension agents (Agricultural Officers and Agricultural Assistants), members of community based organizations (CBOs) and people's representatives. Analysis of the differences among these actors with regard to their awareness on the four dimensions of food security shows that while rice farmers had the highest degree of awareness on production and nutrition dimensions, CBO members had the highest levels of awareness on distribution and socio economic dimensions. Extension agents showed the lowest levels of awareness on all the four dimensions. Exclusive strategies for enhancing the involvement of extension agents in food security programmes are recommended.*

**Key words:** Food security; Dimensions; Awareness on food security concerns;

**F**ood security has become a matter of serious concern the world over. According to FAO (2003) addressing agriculture and population growth is vital to achieving food security. It states that world over 852 million people are chronically hungry and 2 billion people lack food security. India's efforts in achieving food security for all still remain unimpressive (Singh, S. 1998). About 364 million people, one fourth of the world's poor and undernourished population, live in India (FAO, 2000). With just one year (2007-08 to 2008-09), the total food grain production of India reduced from 230.78 million tones to 229.85 million tones (GOI, 2008-09). Kerala, the southern most state of India is a food deficit state producing only 15 per cent of its requirement of food grains. Governments are contemplating exclusive programmes for ensuring food security by harnessing the efforts of development departments, local self government institutions and community organizations. Kerala has recently witnessed an upsurge in community interventions for bridging the

gap between domestic production and requirement of food grains and vegetables (GoK, 2009). Accomplishing food security involves participation of several stakeholders, which is necessarily a function of their comprehensive awareness on the food security concept (Nwanze et al., 2006, Rahman and Choudhury, 2009). The study delineates four dimensions of food security; viz. 'production dimension' dealing with cultivation aspects; 'distribution dimension' dealing with the distribution of food items through public distribution system (PDS) as well as private outlets; 'nutrition dimension' including the concept of balanced diet; and 'socio economic dimension' which includes the socio economic factors influencing food security.

### METHODOLOGY

The study was conducted in twenty panchayats selected randomly from Thrissur district of Kerala and data were collected from rice farmers, extension agents (Agricultural Officers and Agricultural Assistants),

members of community based organizations (CBOs) and people's representatives. Two respondents were selected from each category, so that a sample of eight respondents was collected from each Panchayat, making the total sample size of 160. Based on the exhaustive review of literature on various dimensions of food security, statements that reflect the food security concerns of the community under each of the four dimensions were drafted. Judges' relevancy rating helped identify six statements from each of the four dimensions making a total of 24 statements to measure the awareness of the stakeholders regarding the concerns of the community on various dimensions of food security. The stakeholders gave scores to each of the statements and Kruskal –Wallis test was used to find out whether any differences existed among them with regard to their awareness on the food security concerns of the community. The data was analyzed using SPSS version 14.0

## RESULTS AND DISCUSSION

The awareness levels of different categories were assessed and compared based on the mean rank of Kruskal Wallis test obtained for each dimension which is discussed below. The statistic of Kruskal Wallis test showed that there was significant difference among the stakeholders with respect to their levels of awareness on the food security concerns of the community.

**Table 1. Mean rank of different stakeholders based on the awareness on the production dimension of food security concerns (N=160)**

S.No.	Respondents	Mean rank
1	Farmers	99.55*
2	Extension agents	56.36*
3	CBO members	81.68*
4	People's representatives	84.41*

\* Significant at 1% level of significance  
Kruskal Wallis test

The items of the questionnaire included statements that address the production, distribution, nutrition and socio economic dimensions on food security as understood and felt by the community. This has been done with the objective of finding out whether the stakeholders identify with the community's concern on food security. The respondents with highest mean rank are the most aware on the dimension under study.

Analysis of the mean rank of stakeholders based on their awareness on the production dimension of the concerns of the community regarding food security showed distinct differences as shown in Table 1.

It was found that farmers were the most aware group regarding the production dimension of food security followed by people's representatives and CBO members. The extension agents had the least awareness about the concerns on the production dimension of food security. It can be concluded that the farmers being the most experienced category regarding the agricultural production, they have better awareness in this regard. Moreover, the farmers being explicitly concerned about production of food grains and other crops, they are likely to have more awareness on the concerns of the community on the production dimension of food security. Though it is surprising that extension agents have expressed less awareness on the concerns, it is likely to be so as the concerns of the officialdom might not completely match with the innermost concerns of the farming community regarding the decline in production. Strikingly, the mean rank scores on the distribution dimension also show similar trends as evident from Table 2.

**Table 2. Mean rank of different stakeholders based on the awareness on the distribution dimension of food security concerns (N=160)**

S No.	Respondents	Mean rank
1	Farmers	76.16*
2	Extension agents	61.23*
3	CBO members	99.53*
4	People's representatives	85.09*

\* Significant at 1% level of significance,  
Kruskal Wallis test

The awareness on the distribution dimension was comparatively higher among the CBO members followed by people's representatives and farmers. Here also the extension agents were found to be the least aware group. Majority of the stakeholders found public distribution system (PDS) as an effective strategy for poverty eradication and wished a stable supply of food grains at all times. The explanation cited above seems to be appropriate in this context as well. Since CBO members almost entirely hail from low socio economic category as seen from their distribution based on income

in Table 4.9, they are more dependent on the public distribution system, which is the key dimension of food security. The concerns expressed by them with regard to curtailing of PDS would have been more intense than that of extension agents, who hail from a fairly high socio economic class. The people’s representatives also are likely to share the concerns on limiting the distribution of food items equitably among the members of a community as they directly deal with the day to day issues of common people.

The awareness on the nutrition dimension of food security also show the trends observed in the case of production dimension. Farmers were the most aware group about nutrition dimension, followed by CBO members and people’s representatives. Again surprisingly, extension agents were observed to be the least aware about this. Though most of the stakeholders were aware about the need of a balanced diet for the comprehensive growth of the individual (Table 3).

**Table 3. Mean rank of different stakeholders based on the awareness on the nutrition dimension of food security concerns (N=160)**

S No.	Respondents	Mean rank
1	Farmers	94.60*
2	Extension agents	65.21*
3	CBO members	87.91*
4	People’s representatives	74.28*

\* Significant at 1% level of significance, Kruskal Wallis test

The trends in the level of awareness on nutrition dimension of food security concerns show the higher level of concern of farmers and CBO members in this regard. This seems to be natural as the nutritional dimension of food security is related to the diversity of crops and other enterprises owned by farmers and the issue of ensuring balanced diet at home. Extension agents for this matter might not be so concerned about the nutritional security at the domestic level, which has reflected in the response of the extension agents. This however does not reflect that the extension agents are not ignorant of these dimensions categorically.

Similarly, as the socio economic dimension of food security mostly deals with the purchasing power of the individual, which is in turn a reflection of the socio economic status of the CBO members, this category

was found to have the highest level of awareness on food security, with regard to socio-economic dimension (Table 4)

**Table 4. Mean rank of different stakeholders based on the awareness on the nutrition dimension of food security concerns (N=160)**

S No.	Respondents	Mean rank
1	Farmers	81.26*
2	Extension agents	66.83*
3	CBO members	93.83*
4	People’s representatives	80.09*

\* Significant at 1% level of significance, Kruskal Wallis test

CBO members were followed by farmers and people’s representatives. Extension agents had the lowest rank in this regard too. Since majority of the stakeholders found that food security is directly linked with the purchasing power or income they believed that those families which had regular wage workers and less members were more food secure. The differences among stakeholders regarding the perception on household food security as a function of purchasing power and socio- economic conditions might have reflected in these results. The category with low socio-economic status are more concerned about food security.

**Table 5. Mean rank of Kruskal Wallis test on overall awareness on food security concerns (N=160)**

S No.	Respondents	Mean rank
1	Farmers	81.26*
2	Extension agents	66.83*
3	CBO members	93.83*
4	People’s representatives	80.09*

\* Significant at 1% level of significance Kruskal Wallis test

Awareness of stakeholders on all the dimensions of food security put together, showed significant differences with respect to each other. Here, the awareness level regarding food security concerns was found to be highest among CBO members, closely followed by farmers and people’s representatives as shown in Table 5.

Strikingly, as a summation of the trends observed above, extension agents were found to be the least aware group on the concerns of the community regarding food security. Extension agents in spite of being the most educated as well as economically progressive group did

not have as much awareness on the concerns of the community on food security as the remaining stakeholders. Their socio economic status might have deterred them from being identified with other categories who have expressed more concern on being food insecure.

## CONCLUSION

Analysis of the differences among different actors with regard to their awareness on the four dimensions of food security shows considerable variation. This entails policy decisions to formulate exclusive strategies for enhancing the involvement of extension agents in food security programmes. There should also be due

thrust on organising focused and customized programmes for building awareness on food security for all other stake holders. The study highlights the importance of building synergies by involving all the stakeholders in community based food security programmes. Unless addressed adequately, lack of congruence among the actors would turn out to be detrimental to the sustainability of such programmes. Addressing food security issues in a grossly food deficit state like Kerala requires more of concerted efforts to sustain community action, than technological interventions.

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