Relationship between the socio-economic characteristics of the beneficiary farmers with their perception towards development programmes in Kerala State

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Abstract
The agricultural scenario in Kerala is somewhat unique and distinct from many other states in India in terms of land utilization pattern and the cropping pattern. Agriculture in state is mostly performed by small farmers and practices homestead or mixed farming. The state which had been highly acclaimed for its high social and economic indicators, witnessed a significant decline in agricultural production in the last few decades. Kerala state planning board accounted that the share of agriculture and allied sectors in total Gross State Value Added (GSVA) of the State has declined from 13.70 per cent in 2012-13 to 10.50 per cent in 2016-17 (Anonymous, 2018) [3]. The situation assessment survey of agricultural households conducted by the National Sample Survey Organisation in rural India showed Kerala as having only 23.70 per cent of agricultural households, which is the least in India, while at the national level it was 53.80 per cent in the year 2013 (Anonymous, 2014) [2]. Even though, improved educational opportunities and overseas migration prospects adversely affected the agriculture, the agrarian distress. Government efforts should not only foster the production and productivity, but also needs to retain a competitive and enthusiastic community in farming for future generation too.

Introduction
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Keeping all these in view, the present research paper was focused on to find out the relationship of welfare, perception, developmental programmes
the profile of the beneficiary farmers (Independent Variables) on welfare and perception (Dependent Variables).

**Scope**
The research paper projects the relationship of profile of farmers towards welfare and perception. This would provide an opportunity for the policy makers and executives in identifying the factors that can be manipulated to enhance the welfare and perception variables of the beneficiary farmers.

**Methodology**
The present research paper was focused on the assessment of the relationship of profile characteristic with welfare and perception of beneficiaries on the development programmes. The study was conducted during 2017-18 in the state of Kerala, India. Palakkad district of Kerala state was purposively identified as the locale, as the district is agriculturally active in the state and ranks first in the total cropped area and total food crops area. The simulated research design with control-randomisation was used as the research design. It focused on assessment of perception of beneficiaries towards the development programme.

**Sample and sampling procedure**

**Selection of blocks**
Palakkad district comprises thirteen blocks among them Chittur and Kuzhalmannam blocks were selected based on the ratio of cultivator population to total population.

**Selection of respondents**
As most of the farmers in Kerala used to grow rice, coconut and vegetables in combinations, selection of a large number of respondents specifically from mono- cropping of the selected crops would be the challenging factor for the study. Thus the respondent selection considered farmers with the single crop, two crops and three crops combinations with rice, coconut and vegetables. For the present study respondents under seven combinations were identified viz., rice farming, coconut farming, vegetable farming, rice-coconut combination, rice- vegetables combination, coconut-vegetables combination and rice-coconut-vegetables combinations. Simple random sampling was used for respondent selection. Thirty each in seven combinations formed a total of 210 respondents. All the respondents availed the benefits of one or more development programmes. Thus the 210 respondents could be renamed as beneficiaries of development programmes. The beneficiary in the study was operationally defined as those who availed the financial and technical benefits of the selected development programmes for rice, vegetable and coconut farming.

**Data processing and analysis**
The collected data was entered into the MS-Excel master sheets. The data was scored, compiled, tabulated and subjected to appropriate statistical tools to draw meaningful results and logical conclusion. Non-parametric statistical tool was used for analysis. Statistical tools included mean, frequency, percentage, standard deviation, range, Spearman’s rank correlation and multinomial logistic regression. The statistical analysis was done with the help of computer software, specifically MS-Excel Spread Sheet and SPSS version 20.

**Spearman rank correlation**
As the data set was categorical in nature to find the relationship between the variables, the Spearman rank correlation coefficient (rs), the non-parametric version of the Pearson correlation coefficient was used. The values range was between -1 to 1.

**Results and Discussion**

**Correlation between profile characteristic of beneficiaries and their welfare**

Results of correlation gave evidence that out of the eighteen independent variables, thirteen were found to be significantly correlated with the welfare (Table 1). The variables extension contact (X6), extension participation (X7), assistance from external agency (X8), risk orientation (X10), economic motivation (X14), scientific orientation (X15) and information sharing behavior (X17) of farmers were showing a positive correlation with welfare index at one per cent level of significance.

Farming commitment (X5), mass media participation (X16) and management orientation (X18) pretended for positive correlation at the significance level of five per cent. Variables namely dependency ratio (X3), deferred gratification (X11) were negatively correlated at five percent level of significance, and family size (X2) negatively correlated with welfare at one per cent level of significance.

| Sl. No. | Independent variables | Rank correlation coefficient (rs) |
|---|---|---|
| X1 | Age | 0.060NS |
| X2 | Family size | -0.173*** |
| X3 | Dependency ratio | -0.373*** |
| X4 | Farming experience | 0.027NS |
| X5 | Farming commitment | 0.187** |
| X6 | Extension contact | 0.328*** |
| X7 | Extension participation | 0.149*** |
| X8 | Assistance from external agency | 0.147*** |
| X9 | Orientation towards incentives | 0.113NS |
| X10 | Risk orientation | 0.160*** |
| X11 | Deferred gratification | -0.187** |
| X12 | Political determinism | 0.055NS |
| X13 | Innovative proneness | 0.111NS |
| X14 | Economic motivation | 0.187*** |
| X15 | Scientific orientation | 0.174*** |
| X16 | Mass media participation | 0.265** |
| X17 | Information sharing behaviour | 0.150*** |
| X18 | Management orientation | 0.281** |

* ***Significant at 1% level  
** ** Significant at 5% level NS: Non-Significant

Correlation of welfare with age (X1), farming experience (X4), orientation towards incentives (X9), political determinism (X12) and innovative proneness (X13) were found to be non-significant in nature. Extension contact and extension participation would be effectively related to social dimensions of welfare. Positive relation of these variables could improve indicators like social network and social participation. Assistance from external agencies in the form of kind and cash would indicate change in financial and farm dimensions. Risk orientation would enhance the chances to practices innovative technologies in farming, which could increase the index scores of indicators like technology adoption, farm income per acre, household annual income etc. Profile analysis depicted that mostly beneficiaries had high to medium level of economic motivation.
Further increase in economic motivation would imply better improvement in the indicators at physical and financial dimensions. Increase in scientific orientation might impact on farm dimensions indicators namely farm practices, and technology adoption and for reducing the scores of farm expenditure per acre. Mass media participation and information sharing behavior would interfere with the indicators as personal growth in human dimensions and indicators as social participation and social contribution in social dimensions. Management orientation of farmer was found to be in same direction of welfare indicators as resource utilization, and conservation in natural resource dimension and most of the farm dimension indicators.

Negative correlation coefficient of family size and dependency ratio depicted the movement of variables in the opposite direction of welfare. Increase in these variables can impact the indicators like household expenditure, and food security to reduce the welfare index. Profile analysis depicted a medium range of deferred gratification for the beneficiaries. Even though better deferred gratification enhance the farm and household management, strict postpone of immediate satisfaction would influence the welfare of present condition, thus the variables find to move in opposite direction.

The results are in concordance with the findings of Mishra et al. (2002) [6], Ukoha et al. (2007) [8], Vinay kumar (2008) [10], Abdullah et al. (2017) [1] and Rabbi et al. (2017) [7] on the relation of profile with welfare indicators.

Correlation between profile and perception of beneficiaries
For the perception of beneficiaries, it was inferred that out of eighteen, thirteen variables were correlated and had significant relationship with the dependent variable (Table 2). Three variables viz., farming experience (X4), farming commitment (X5) and orientation towards incentives (X9) had positive significant relationship with perception at one per cent level of probability.

The variables namely, age (X1), extension contact (X6), extension participation (X7), assistance from external agency (X8), deferred gratification (X11), economic motivation (X14), scientific orientation (X15) and information sharing behavior (X17) showed a positive and significant relationship with perception at five per cent level of probability.

Variable risk orientation (X10) and management orientation (X18) had significant negative correlation with perception at one per cent and five per cent levels of probability respectively.

Variables namely family size (X2), dependency ratio (X3), political determinism (X12), innovative proneness (X13) and mass media participation (X16) exhibited non-significant relationship with perception.

Long years of farming experience would give farmer more chances to contact with development agencies and to be aware on various programmes, their objectives and activities implemented under the programme. This was evident with the positive significant relation of farming experience with perception. Positive significant relation of farming commitment with perception indicated that, farmers with high levels of commitment were able to make wide assessment of existing programmes.

Table 2: Rank correlation between profile and perception of beneficiaries (n=210)

| Sl. No. | Independent variables               | Rank correlation coefficient (rs) |
|---------|------------------------------------|----------------------------------|
| X1      | Age                                | 0.234**                          |
| X2      | Family size                        | 0.039NS                          |
| X3      | Dependency ratio                   | -0.040NS                         |
| X4      | Farming experience                 | 0.152***                         |
| X5      | Farming commitment                 | 0.177***                         |
| X6      | Extension contact                  | 0.227**                          |
| X7      | Extension participation            | 0.277**                          |
| X8      | Assistance from external agency    | 0.166**                          |
| X9      | Orientation towards incentives     | 0.153***                         |
| X10     | Risk orientation                   | -0.202***                        |
| X11     | Deferred gratification             | 0.214**                          |
| X12     | Political determinism              | 0.041NS                          |
| X13     | Innovative proneness               | 0.078NS                          |
| X14     | Economic motivation                | 0.225**                          |
| X15     | Scientific orientation             | 0.354**                          |
| X16     | Mass media participation           | 0.021NS                          |
| X17     | Information sharing behaviour      | 0.183**                          |
| X18     | Management orientation             | -0.234**                         |

*** Significant at 1% level  
** Significant at 5% level  
NS: Non-Significant

Computed correlation coefficient of orientation towards incentive and assistance from external agency explained the interest of farmers for technical and financial services under various programmes. Increases in age would imply much better knowhow and exposures for development programmes and thus retained significance with perception. Regular extension contact with staffs at development agencies and frequent extension participation in trainings, meetings and seminars improves the perception. Economic motivation would thrust agriculture as a livelihood option and scientific orientation would structure farm practices and farmer perceived the development programmes as a means for that. And finally the variable risk orientation and management orientation found to move in opposite direction to perception. Farmers who are ready to accept all challenges in agriculture and have acquired enough managerial skill of the farm never wish to be dependents of Government assistance thus retaining a negative direction of movement.

The results are in concordance with the findings of Kansana (2008) [5], Vinayakumar (2015) [9], Hinduja et al. (2017) [4] on the relation of profile with perception.
Conclusion
The study shows that there is positive influence of communication and psychological behavior of the farmers towards their welfare. It is suggested that, there is a need of government assistant to extension agencies to influence the farmer’s communication and psychological behavior for their welfare and their perception. Regular extension contact with staffs at development agencies and frequent extension participation in trainings, meetings and seminars improves the perception. The findings shows that the government still can play a vital role in improving their developmental programmes for the welfare of the farmers

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