



FACTORS AFFECTING PARTICIPATION OF YOUTH IN AGRIBUSINESSES IN UDHAMSINGH NAGAR DISTRICT OF UTTARAKHAND

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ABSTRACT

This study was aimed at assessing the factors affecting participation of youth in agribusiness in Udhamsingh Nagar district of Uttarakhand. The data were collected from both primary and secondary sources. The primary data for this study was collected from 160 youth through application of appropriate statistical procedures.

*From sampled 160 respondents, it was found in the study area that youths are mainly involved in **Agricultural Products Business (42 per cent), Agricultural Equipment Business Or Agricultural Machinery Business (12 per cent), Agricultural seed production (21 per cent) and Agro-allied Business (25 per cent).***

In the study area it was observed that 48.5% of the respondents are working in different kinds of agribusiness. The result of the logistic regression model indicated that youth participation in micro and small agribusiness is significantly affected by access to land, access to extension service, access to credit, education and career ambition of youth. Therefore, providing improved system of credit provision, equally distributing available land, improving extension system and changing way of their mindset about agriculture are recommended to accelerate the participation of youth in agribusiness

Key : Agribusiness, employment, youth

1. INTRODUCTION

The poor participation of youth in agricultural activities in India has been a problem to all agriculturalists, administrators and agricultural researchers because of the current situation of agriculture production. The agriculture sector calls for more interventions and improvement in order to ensure the sustainability of food security for the increasing population. One of the pitfalls of the global economic crisis is the rising of unemployment, particularly among the youth people. The major effect of this crisis is inflation which triggers the rising of food prices, commodities and fuels in the market.

With production of agriculture activity of \$375.61 billion, India is 2nd larger producer of agriculture product. India accounts for 7.39 percent of total global agricultural output. Contribution of Agriculture sector in Indian economy is much higher than world's average (6.4%). It is a fact that the efforts to advance the national economy based on agricultural production has to be taken seriously in deal. Youth are the future of a country with their limitless energy and aspiration about the future.

The agricultural sector is long left by the youth even though there is lucrative long run potential economic growth. Youths are not fully engaged in agriculture due to many confronting issues challenging them. Youths are influenced by many factors in order to not take part in any agricultural businesses.

Nearly 70% of India's population is below the age of 35 years making India the youngest nation in the world and interestingly 70% of them live in rural areas. In 2020, the average Indian will be only 29-years-old, whereas in China and the United States of America the average age is estimated to be 37 years. We may utilize this demographic dividend for taking Indian agriculture to new heights by channelizing the creative energies of the youth through development of skills, knowledge and attitudes.

Many studies on role of youth in agriculture have been conducted throughout the world as general. But limited attention has been given to agribusinesses especially in relation to youth in India in general and in the state of Uttarakhand in particular. Above all, there is pressing need to change the paradigm of youth towards looking the agriculture sector as one of the opportunities for them to be self-relied. In general, the present study intends to identify the existing level of participation of youth in agriculture; reasons or factors responsible for low participation therein; and identify the factors that can motivate youth to participate more in agribusiness activities.

The general objective of this study was assessing factors affecting participation of the unemployed youth in agribusinesses.

1.1 Significance of the study

The importance of this study will be serving as guidance for other researchers, whom may deal on similar topics, related to challenges hindering youth to participate in agribusiness and also will help the actors to focus on problems as one of the interventions for enhancing youth so they become input for the industry.

Finding of the study may also help policy and strategy makers in designing and implementing appropriate policies that would enhance the participation of unemployed youth in agribusinesses in India.

2. RESEARCH METHODOLOGY

2.1 Description of the Study Area

Location and Size:

District Udham Singh Nagar is situated in the south-east part of Kumaon Division of the state of Uttarakhand. It is situated between the latitudes 28° north and longitude 78° east. It is bounded in the north by the districts of Nainital and Champawat, Bijnor in the west, Moradabad in the south-west, Rampur and Bareilly in the south and Pilibhit in the south and south-east. The eastern boundary meets with Nepal. The entire north and eastern boundary of the district is crowned with the reserve forests of Nainital and Champawat. The geographical area of the district is 2542 sqkms. and acquires 9th place by area in the state of Uttarakhand.

Summary of general statistics:

As per the Census India 2011, Udham Singh Nagar district has 3,08,581 households, population of 16,48,902 of which 8,58,783 are males and 7,90,119 are females. The population of children between age 0-6 is 2,29,162 which is 13.9% of total population. The sex-ratio of Udham Singh Nagar district is around 920 compared to 963 which is average of Uttarakhand state. The literacy rate of Udham Singh Nagar district is 62.94% out of which 69.69% males are literate and 55.6% females are literate. The total area of Udham Singh Nagar is 2,542 sq.km with population density of 649 per sq.km. Out of total population, 64.42% of population lives in Urban area and 35.58% lives in Rural area. There are 14.45% Scheduled Caste (SC) and 7.46% Scheduled Tribe (ST) of total population in Udham Singh Nagar district.

3. RESULTS AND DISCUSSION

3.1. Youth participation in agribusiness

Participation of youth in any of agribusiness was the dependent variable that was dealt in this study. From the result it was found that, about 53% youth were not participating in any of agribusiness. It was only 47% of respondents that are participating in any of agribusiness (table 1).

Table 1: Summary of participant and non participant

| Description | Frequency | Percent |
|-----------------|-----------|---------|
| Non participant | 85 | 53.0% |
| Participant | 75 | 47.0% |
| Total | 160 | 100.0% |

Source: result of own survey, 2019

3.2. Challenges: why youth are not participating in agribusiness

From the survey it has been found that about 85 respondents were not participating in any of agribusiness. They stated there were many reasons for why could not participate in any of agribusiness. Land unavailability, money problem, lack of agricultural education / training, unwillingness of family, absence of facilitator, lack of information and infrastructure were some of the reasons as stated by almost 53% of respondents.

3.3. Econometric Analysis of factors affecting youth participation in agribusinesses

Before the logit regression, the explanatory variables were subjected to multi-collinearity test and chi-square test to determine whether there were significant differences between the variables for participants and non participants. Table below shows results of the differences between variables for participants and nonparticipants in agribusiness following the chi-square test.

Table 2: Differences for dummy variables between participants and Non-participants in agribusinesses

| Variables | Item | Participant | | Non participant | | X ² -value | Sig |
|--------------------|------------------|-------------|----|-----------------|----|-----------------------|----------|
| | | N | % | N | % | | |
| Sex | Female | 28 | 34 | 32 | 37 | 0.164 | 0.688 |
| | Male | 47 | 66 | 53 | 63 | | |
| Extension | No | 18 | 20 | 75 | 88 | 72.905 | 0.000*** |
| | Yes | 57 | 80 | 10 | 12 | | |
| Land availability | No | 38 | 48 | 77 | 90 | 34.073 | 0.000*** |
| | Yes | 37 | 52 | 8 | 10 | | |
| Credit Access | Yes | 27 | 39 | 75 | 88 | 40.007 | 0.000*** |
| | No | 48 | 61 | 10 | 12 | | |
| Migration plan | Planned to leave | 38 | 45 | 55 | 64 | 1.460 | 0.246 |
| | Planned to live | 37 | 55 | 30 | 36 | | |
| Family back ground | Agriculture | 49 | 69 | 50 | 59 | 1.556 | 0.210 |
| | Non agriculture | 26 | 31 | 35 | 41 | | |
| Career ambition | Agriculture | 30 | 42 | 22 | 26 | 4.383 | 0.036** |
| | Non agriculture | 45 | 58 | 63 | 74 | | |

Note: ***, and ** are statistically significant at 1%, and 5% significance level respectively

Source: computation from own survey, 2019

From the table above, extension service, land, and career ambition are all significant at 1% significance level. These imply that there was significant difference in extension service, career ambition and land availability between participant and non participant at 1% significant level.

From the study, it was found that 20% of respondents were never got extension service, where as about 80% of respondents got extension service, out of those participating in agribusinesses. This also supports the evidence that extension service enhances youth to involve in agribusinesses, implying that it created difference between participant and non participant of agribusiness; hence the highest chi-square value shows the significance.

Land availability was also significant at 1% significance level as found from the study. From the table above, one can see that 52% of respondents replied availability of land in the study area; where about 48% of respondents replied that land is available from those participating in agribusinesses. This also supports land availability enhances youth to involve in agribusinesses, implying that it created difference between participant and non participant of agribusiness; hence the highest chi-square value and its p-value value show the significance.

It was also found that there is difference between participant and non participant about the variable credit access; hence its chi-square value and its p-value read significance. From participants, it was found that about 39% of participants took credit from any of available credit sources; whereas about 61% of 75 respondents took nothing.

Career ambition was also found to create difference between participant and non participant; hence it is significant at 5% significant level. From participants, it was found that about 42% were planning to make agriculture their means of livelihood, where about 58% of 75 respondents are hoping to leave agriculture stating many reasons.

From these it was seen that there was significance difference in migration as an adaptive strategy between participant and non participant of agribusiness. There are, however, no significant differences between participants and non-participants for the rest of the two variables.

Sex was insignificant, implying that there was no significant difference about sex of respondent between participant and non participant. It was found that about 66% of participant's respondents were male and 34% were female. Even though sex is not significant, but one can understand that male are still dominating agribusinesses than female (table 18).

From the table 13 above, it can also be seen that migration as an adaptive strategy was insignificant. This shows that there was no significant difference about migration as an adaptive strategy between participant and non participant. From the result it was found that even from participant about 45% were planned to leave their current resident and only about 55% were decided to live in their current living area. On another hand it was also found that about 64% of nonparticipant planned to leave area, where the rest non participants are yet planning to live there.

From the table 2 above, it was also found that family back ground is insignificant. This means that there was no significant difference about family back ground between participant and non participant. From the same variable it is found that 69.0% of participants were from agriculturist parents and 59% of non participants were from farmer families.

3.4. Testing multicollinearity problems

Multicollinearity is a problem that occurs with regression analysis when there is a high correlation of at least one independent variable with a combination of the other independent variables. As it is known, computing contingency coefficient is one way of detecting if there is multicollinearity problem in dummy and categorical variables. Accordingly, it was observed no

problem of multicollinearity. It was found that contingency coefficients of all variables were less than 0.75 and the VIF for continuous variable was also much less than 10.

3.5. Econometric Analysis Result

The results of empirical estimation of the logit model showing the coefficients, standard errors, significance levels, marginal effects and the constant together with the log likelihood value, LR Chi-Square, Pseudo R-square and the overall significance of the model is presented in table below.

Table3: logistic regression result

Logistic regression Number of obs = 160
LR chi2(11) = 122.27
Prob> chi2 = 0.0000
Pseudo R2 = 0.5785

| Participation | B | S.E. | Sig. | Odds ratio |
|--------------------|--------|-------|------|------------|
| Sex | .328 | .593 | .687 | 1.269 |
| Marital status | -.315 | .448 | .395 | .687 |
| Age | .051 | .087 | .598 | 1.042 |
| Extension* | 3.465 | .594 | .000 | 31.967 |
| Education** | -.056 | .074 | .045 | 1.057 |
| Land* | 1.794 | .635 | .005 | 6.011 |
| Credit* | 1.777 | .614 | .004 | 5.915 |
| Market information | -.121 | .236 | .608 | .886 |
| Migration | .675 | .565 | .232 | 1.963 |
| Family background | -.816 | .592 | .168 | .442 |
| Career Ambition** | -.917 | .544 | .042 | .400 |
| Constant | -2.119 | 2.618 | .418 | .120 |

Source: Result from own survey computation, 2019

Note: *, and ** are statistically significant at 1%, and 5% probability levels respectively.

From the above logit regression result it can be seen as Chi- square statistic suggests that the overall model was statistically significant at 1% level of significance. The log likelihood ratio statistic is significant at 1%, meaning that the explanatory variables included in the model jointly explain the probability of youth to participate in agribusiness. This implies that the null hypothesis that participation of youths in agribusiness is not determined by personal, technical and institutional factors is rejected. A Pseudo R-square of 0.5785 implies that all the explanatory variables included in the model were able to explain about 57.85% of the variations in the dependent variable. This is an indication that the estimated logit model is appropriate.

The variables; extension access, credit access, and land access were found to be significant at 1% and career ambition and education was found significant at 5% level, hence influenced youth participation. Extension access, credit access, and land access were found to be positively related to participation of youth in agribusiness, whereas career ambition and education of youth was found to be negatively related to participation of youth in agribusiness.

Access to credit as variable was significant at 1% with an odds ratio of 5.915. The coefficient of access to credit is positive and implies that access to credit positively affects probability of

participation in agribusiness. The odds ratio of 5.915 implies that the odds ratio in favor of youth participation in agribusiness increases by a factor of 5.915 for youth who had credit services keeping other variables constant. This means that youth who have access to credit facilities have a higher probability of participating in agribusiness than their counterparts who do not.

Extension assistance variable was significant at 1% significance level. Its coefficient was positive and implies that access extension assistance is positively associated with the probability of participation youth in agribusiness. With the its odds ratio it implies that, the odds ratio in favor of showing youth participation in agribusiness increases by a factor of 31.967 for youth who had extension services keeping other variables constant. This means that youth who have access to extension assistance have a higher probability of participating in agribusiness than their counterparts who do not. This is consistent with the study of Tadesse (2011) which found that if fruit producer gets extension assistance, the amount of fruits supplied to the market increases.

Land availability variable was significant at 1% significance level. The coefficient of land is positive and implies that land availability is positively associated with the probability of participation in agribusiness. With its odds ratio it implies that, the odds ratio in favor of showing youth participation in agribusiness increases by a factor of 6.011 for youth who had access land keeping other variables constant. This means that youth for whom land is made available, have a higher probability of participating in agribusiness than youth for whom land is not made available. This was consistent with the result reported by Tura et al (2016) in which land access is positively related to the youth involvement in agriculture at 10% significance level.

Career ambition variable was significant at 5% with an odds ratio of 0.400. The coefficient of Career ambition is negative and implies that Career ambition is negatively associated with the probability of youth participation in agribusiness. With the its odds ratio it implies that, the odds ratio in favor of showing youth participation in agribusiness decreases by a factor of 0.400 for youth who had not preferred agribusiness as their future profession, keeping other variables constant. This is similar to the study of Akpan et al (2015) in which three-quarters of the students has a bad perception of agriculture and did not think embrace agricultural career in the future.

Education variable was significant at 5% with an odds ratio of 1.057. The coefficient of education is negative and implies that education is negatively associated with the probability of youth participation in agribusiness. With the its odds ratio it implies that, the odds ratio in favor of showing youth participation in agribusiness decreases by a factor of 1.057 for youth with higher education, who had not preferred agribusiness as their future profession, keeping other variables constant.

4. SUMMARY AND CONCLUSION

This study was aimed at assessing factors affecting youth participation in agribusiness in Udham Singh Nagar district of Uttarakhand.

Data were collected from both primary and secondary sources. The primary data were collected from individual using open and close ended questionnaire. The primary data for this study were collected from 160 randomly selected youth from Rudrapur and Gadarapur Block of the district. The analysis was made using descriptive statistics and econometric model using SPSS and STATA software. All the sampled youth were those who are either participating or not-participating in any agribusiness.

Factors affecting youth participation in agribusiness was analyzed using logit model. From sampled 160 respondents, 62.5% were male headed and the rest 37.5% were female with respondents aged 18 to 33 years old.

Constraints affecting youth participation in agribusiness are found from the study. Land problem, credit problem, and lack of education / training problems were found in hindering youth from participating in agribusiness.

The result of logit regression analysis result shows that youth participation in agribusiness is significantly affected by access to extension service, land availability, credit access, education and career ambition of youth. Due to many reasons, it was found that large numbers of youths are not participating in agribusiness. It was only about 47% of respondents were participating in agribusiness. This implies agribusiness is creating not very satisfactory employment opportunity for youth despite it has potential in creating employment for large numbers of young.

Recommendations

The recommendations or policy implications drawn from this study are based on the significant variables from the analysis of present study. Promotion of land reforms and creation of laws that ensure young people's access to production resources that ensure equal opportunities for young people should be adopted.

Secondly, the results of econometric analysis also indicate that youth participation in agribusiness is positively and significantly affected by access to credit service. In the study area it was identified as commercial banks are providing credit service for young so that they can be involved in agribusinesses. In getting credit from bank, youth are to to arrange collateral, which many times become very difficult. Therefore, if youth get the credit without any collateral things will become better. For this government should facilitate more simple strategy for youth in giving credit and may establish other system of providing credit.

Thirdly, youth participation in agribusiness is significantly and positively affected by access to extension service or assistance. Therefore, government should strengthen efficient and area specific extension systems and supporting development agents more than what have been observed, by giving continuous capacity building trainings to assist youths to be involved more in agribusiness.

It was also observed that education is negatively affecting agribusiness. As youths are getting more education they are willing and trying to go for white color job and agribusiness is not considered a white color job. But now in many parts of the country, some highly educated youths are coming for agriculture and agribusiness particularly organic farming and related business. Uttarakhand has a great potentiality in this form of business. More awareness should be provided to attract youths in this area.

Lastly, youth participation in agribusiness is significantly and negatively affected by their career ambition. Most youth preferred non agricultural/ non agribusiness career as their means of future livelihood giving low value for agri-business profession. Therefore, providing more awareness for youth and their family is found to be intervention tool so that youth make no difference between agribusiness and non agribusiness profession.

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