"A study on socio-economic upliftment of tribal farmers through adoption of recommended rice technology in Bastar district of Chhattisgarh"

By

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ABSTRACT

The present study entitled “A study on socio-economic upliftment of tribal farmers through adoption of recommended rice technology in Bastar district of Chhattisgarh” was carried out during 2004 and 2005 with the following specific objectives:

1. To study the socio-personal and socio-economic characteristics of the contact and non-contact tribal farmers,

2. To study the psychological and communicational characteristics of the contact and non-contact tribal farmers,

3. To find out the level of knowledge of the contact and non-contact tribal farmers about recommended paddy production technology,

4. To study the extent of adoption of recommended paddy production technology by the contact and non-contact tribal farmers,

5. To study the technological gap in adoption of recommended technology of paddy crop among the contact and non-contact tribal farmers, and

6. To study the constraints and ascertain suggestions of contact and non-contact tribal farmers to overcome the constraints associated with technological gap.

The study was conducted in Bastar district of Chhattisgarh state. The Bastar district consists of 14 blocks. All the blocks are denoted as tribal blocks by the Government. Five blocks were selected for the present study on the basis of their geographical distribution in different directions viz. North, South, East, West and central part. All the selected blocks possess more than 67 per cent of the tribal population growing paddy as main crop. From these selected five blocks, 40 RAEO circles were selected using proportional allocation with simple random sampling method. From each selected RAEO circle, six contact tribal farmers and six non-contact tribal farmers were selected. Thus, a sum of 480 respondents (240 contact and 240 non-contact tribal farmers) constitute the sample for the present study. The data were collected by personal interview method with the selected respondents using pre-structured interview schedule.

The independent variables included in the study were age, education, type of family, size of family, type of house possess, material possession, migration habit, land holding, social participation, occupation, subsidiary occupation, income level, availability of irrigation, source of irrigation, availability of resources, credit
facilities, socio-economic status, knowledge about recommended rice production technology, attitude towards recommended modern agricultural technology, risk preference, cosmopolitanness, source of information, contact with extension agents and exchange of information. The dependent variables considered in this study were extent of adoption of recommended rice production technology and level of productivity of rice crop.

In order to find out the level of knowledge and extent of adoption in relation to recommended rice production technology, 11 practices viz. improved sowing method of rice improved variety, seed treatment, nursery method, seed rate, time of sowing, fertilizer doses, irrigation, weed control, insect & their control and disease & their control and major disease & their control were considered. A three point rating scale containing “No knowledge/adoption”, “Partial knowledge/adoption” and “Complete knowledge/adoption” with scores of 0, 1 and 2, respectively was employed to know the knowledge/adoption gap among the respondents regarding selected practices of recommended rice production technology. Statistical techniques used were frequency, percentage, t-test, Z-test and correlation measures.

The present study conducted in Bastar region of Chhattisgarh state on socio-economic upliftment of tribal farmers through adoption of recommended rice technology can be concluded as under:

• The majority of the contact and non-contact respondents in the study area i.e. Bastar region belonged to middle age group, illiterate, having nuclear type and medium size of family with kachha type of house. They were having medium risk preference, low cosmopolitanness, carrying out 2-4 occupations and belonged to very low to low income groups (Rs. 12000-24000). Majority had no availability with low sources of irrigation and nil to partial availability of other resources for farming/agricultural activities. Majority of the respondents are not migrating from their place but the population, which are migrating to other state are found to migrate only in the post-rainy season (rabi) because of lack of irrigation facilities and rain dependent monocropping system in the kharif season only.

• Most of the respondents had medium knowledge level of recommended rice production technology, moderate attitude towards Recommended Modern Agricultural Technology (RMAT), low to medium level of social participation, medium to low socio-economic status, utilized institutional sources for credit facilities, low level of extension contact with extension agents and medium level of exchange of information regarding recommended rice production technology.

• The most of respondents in the study area of Bastar district were of no migration habit. The male migratory were in majority. The maximum of the tribal farmers migrated out of state for one season particularly in rabi season.

• The respondents in majority utilized institutional sources of credit facility, utilized friends and progressive farmers, RAEOs, kisan mela and radio to receive the information of recommended rice technology. Most of the respondents were engaged in collecting and selling of the forest products as the subsidiary occupation.
The major contributing practices for knowledge and adoption gaps were major diseases and their control, use of weedicides, major insects and their control, seed treatment and improved nursery. Significant difference was investigated between the technological gaps of contact and non-contact tribal farmers.

- Most of the contact and non-contact tribal farmers had attained medium level of productivity of rice crop (10-20 q ha⁻¹). The productivity level of contact tribal farmers was slightly higher than the non-contact tribal farmers.

- The various characteristics like education, contact with extension agents, availability of resources, credit facilities, level of knowledge, availability of irrigation, socio-economic status and land holding of the respondents were found positive and highly significant with their extent of adoption. The risk preference, material possession, sources of information, exchange of information and annual income of the respondents had positive and significant relationship with their extent of adoption. In addition, attitude towards RMAT of the contact tribal farmers was positive and significantly correlated with their extent of adoption.

- The most serious constraints faced by the contact and non-contact tribal respondents in reducing technological gap were lack of irrigation facilities, grazing problem and erratic rainfall. The other major constraints were small size landholding and requirement of more investment for contact tribal farmers, whereas lack of education and lack of credit facilities were the other major constraints reported by non-contact tribal farmers.

- The most important suggestions as perceived by the contact and non-contact tribal respondents were availability of adequate irrigation facility, availability of seed and fertilizer at subsidized rate, proper marketing facility, farmers training should be organized at village level and credit facility at proper time.

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