CONSTRAINTS IN ADOPDION OF TOBACCO PRODUCTION TECHONOLOGY

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Tobacco is one of the most important cash crops of Bihar having wider export potential. The quality of the natural filter produced in India is one of the best in the world. Besides this, the medicinal property of the plant to prevent blood clot are also well researched.

However, one should not forget that the alarming gap that still exist between the developed and adopted technologies. A study conducted by Indian Council of agricultural Research itself reports this gap to be more than 70%. (ICAR, Paroda, 1999). It is the case, serious attempt is requried to understand the resources for non-adoption of developed technologies and such process should be attempted considering the complex socio-economic environment, in which the farmers live and operate. The results of such investigation can provide valuable insights for research and extension persons to redefine their technology development and dissemination agenda to suits the needs of specific clientele group. Hence expending the area under tobacco and increasing production and productivity assumes significance. Keeping this in view the present investigation was undertaken with the following specific objectives.

1. To study the socio-economic condition of tobacco growers.
2. To identify the level of knowledge of tobacco growers on various production technologies.
3. To identify the major constraints in adoption of imporved tobacco production technologies.

METHODOLGY :

The study was conducted in the Samastipur district of Bihar state an *expost–facto design*. From two blocks of Samastipur district Kalyanpur and Warishnagar having the greater area under cultivation of tobacco were selected from the total of 2 blocks. Six villages, 'Dhrubgama and Birshingpur from Kalyanpur and four villages' Rohua, Rampur, Gohi and Kashore from Warisnagar block were selected based on the highest area under tobacco. From each villages, 13 growers were selected randomly making 78 respondent as the total sample size. A semistructured interview schedule

RESULTS AND DISCUSSION :

(A) Socio-econmic Condition of Tobacco Growers.

(i) Caste : The respondents belong to different caste categories in the village. The investigantion showed that the majority of the respondents belong to medium caste categories (55.12%) followed by high (25.64%) and low (19.24%) caste categories.

(ii) Age : The investigation revealed that 50% of the tobacco growers from above 40 years followed by 41% from the 25 to 40 years and only 9% below 25 year age group.

(iii) Education : The result indicated that the respondents have education to the level of middle (26%) followed by higher secondary (21%), illiterate (19.28%) primary (14%), senior higher secondary (13%) and graduate and above (8%).

(iv) Land Size : The findings of the investigation points that 50% of the respondents are in the marginal group followed by 315 in small, 10% in large and 7% in medium.

(v) Housing : 4% of the tobacoo growers lives in mixed housing and 33% in kachcha and 23% in pukka housing.

(vi) Irrigation Source : One water pumpset formed the major source of irrigation for 78% of the respondents followed by Goverment tube wells for 22%.

(vii) Family Pattern : Joint family formed the pattern of housing for 59% of the respondents while 41% of them lives in single family.

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(B) Knowledge of Tobacco Production Technologies.

Knowledge about tobaco cultivation of respondents were analysed and the relevatn data has been presented in Table 1.

Table 1. Tobacco Production Technologies.

(N=78)

S. No.	Tobacco production technology	No of respondents	%
1.	Name of the improved varieties of tobacco	55	71.33
2.	Recommended seed rate	54	69.66
3.	Recommended time of sowing	58	75.00
4.	Method of transplanting	45	58.23
5.	Depth of seedlings	40	51.33
6.	Resommended does of manures	52	67.66
7.	Recommended Does of N.P.K.	41	53.16
8.	No. of irrigation	38	59.50
9.	No. of interculture	32	41.25
10.	No. of chemical used for plant protection	33	42.00

Note : The percentage is calculated on the basis of response.

It is evident from the above table that majority of tobacco growers are having good knowledge of improved tobacco varieites (71.33%) along with recommended time of its sowing (75%), Seed rate (69.66%), manures (67.66%) and fertilizers (53.16%). However they lack knowledge regarding interculture practices of tobacco production (41.25%) and plant protection measures(42%).The study clearly indicates the cause of low production & productivity of tobacco as the sources fails to control their crops from infestation of disease and insects pests, which reduces the total yield or sometimes destroy the whole crops.

(C) Constraints in Adoption of Technology.

The causes of non-adoption of technology were analysed and the results are presented in Table. 2

Table 2. Major Constraints in Adoption of Technology.

(N=78)

S. No.	Particulare	No. of Respondents	%
1.	Lack of Crediable source for information	56	71.79
2.	Risk cover	51	65.38
3.	Not suitable for local condition	48	61.55
4.	Un awarness about technology	42	53.84
5.	Illiteracy	16	20.51

Note : The percentage is calculated on the basis of response.

It is evident from the above table that the tobacco growers feel that unavailability of timely and creadiable source for information regarding tobacco production (71.79%) is the major constraints in adoption of improved technology. however 65% growers feel that the technology generaly does not cover the risk in production and are also not suitable for the local condition (61.55%). Therefore, the technology should be need based which not only cover the production risk but also based on the available resources and climatic conditon. Illiteracy (20.51%) and unawareness (53.84%) the another constraints which also require proper consideration.

CONCLUSION

It has been concluded that the bio-physical, psychological and administrative constraints like lack of marketing faciltes, high transportation charges, lack of security, weed control, plant protection measures, high cost of inputs and unawareness about latest technology of tobacco production; like land tobacco growers and this restrict the cultivators either to reduce area under the tobacoo cultivation or compel them to keep tobacco crop in their cropping system.

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