

**RESEARCH ARTICLE :**

# A study on association of profile characteristics with the level of attitude of watershed farmers towards various NRM practices in watershed areas of Andhra Pradesh state

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**SUMMARY :** The paper describes the association of profile characteristics with the level of attitude of watershed farmers towards various NRM practices in watershed areas of Andhra Pradesh state. The results indicated that positive and significant relationship is seen between level of attitude of watershed farmers towards NRM practices and their profile characteristics like age, education, farm size, farming experience, extension contact, mass media exposure, risk taking ability, status of watershed, group leadership and group norms. The value of the Co-efficient of multiple determination ( $R^2$ ) indicated that the five independent variables namely trainings, information seeking behaviour, mass media exposure, extension contact and input usage pattern put together could explain 79.42 per cent of variation in the dependent variable of the level of attitude of watershed farmers towards various NRM practices.

**KEY WORDS :**

NRM, Watershed farmers and attitude

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## **BACKGROUND AND OBJECTIVES**

The nature and status of natural resources play a pivotal role for sustainable yields in various crops. The potentiality of these resources especially like soil and water is decreasing in alarming propositions, there by effecting farming situation as well as crop production both at micro and macro level. The isolated approach of natural resource management does not yield expected results whereas community based management

derives maximum benefits to the farmers in terms of soil, water and moisture conservation for sustainable use of these resources for better crop production. There is every need to gauge the degree of natural resource management behavior of the farmers for their sustainable use. Keeping this in view the present investigation entitled as "A study on the association of profile characteristics with the level of attitude of watershed farmers towards various NRM practices in watershed areas of Andhra Pradesh state.

## RESOURCES AND METHODS

The state of Andhra Pradesh and the three regions *i.e.*, Telangana, Coastal Andhra and Rayalaseema and from each region one district *i.e.*, Mahaboobnagar from Telangana, Prakasham from Coastal Andhra and Anathapur from Rayalaseema were selected purposively. From each district two IWMPs, from each IWMP area one mandal, from each mandal four villages and from each village ten watershed farmers were selected randomly, thus, a total of six (6) IWMPs, six (6) mandals, twenty four (24) villages and two hundred and forty (240) farmers were considered as sample for the study.

## OBSERVATIONS AND ANALYSIS

It is inferred from the Table 1, positive and significant relationship is seen between level of attitude of watershed farmers towards NRM practices and their profile characteristics like age, education, farm size, farming experience, extension contact, mass media exposure, risk taking ability, status of watershed, group leadership and group norms. By virtue of gaining experience due to increased age coupled with formal schooling the farmers will be definitely inclined to form an attitude towards NRM activities in watersheds. These results were in

conformity with the findings of Rahman and Yamao (2006), Chandran and Chackacherry (2008), Golya Naik (2008), Prasad (2004), Bhawani Shanker Dadheech *et al.* (2008), Gupta *et al.* (2010) and Nanthakumaran and Palanisami (2010). Any improvement in psychological characteristics like extension contact, mass media exposure and risk taking ability significantly enhances the thinking capacity of the individuals. These results were in conformity with the findings of Vidhyanand (2004) and Golya Naik (2008). The good status of the watershed probably facilitates the farmers to form an impression on NRM activities of watershed. The group characteristics like leadership and norms definitely drive the individuals to get motivated to think into the deepest sense of the utility of the NRM activities under watershed.

The Table 2 indicates that the value of the Co-efficient of multiple determination ( $R^2$ ) indicated that the five independent variables (trainings, information seeking behaviour, mass media exposure, extension contact and input usage pattern) put together could explain 79.42 per cent of variation in the dependent variable of the level of attitude of watershed farmers towards various NRM practices. The computed F-value and corresponding partial regression co-efficient (b) values of these five

**Table 1 : Correlation of profile characteristics with the level of attitude of watershed farmers towards various NRM practices**

Sr. No.	Independent variables	Level of Attitude
1.	Age	0.1609*
2.	Education	0.1372*
3.	Farm size	0.1401*
4.	Farming experience	0.6825**
5.	Trainings undergone	0.1221NS
6.	Extension contact	0.1650*
7.	Input usage pattern	0.0829NS
8.	Environmental awareness	0.0760NS
9.	Socio-political participation	0.0728NS
10.	Mass media exposure	0.1653*
11.	Information seeking behaviour	0.0805NS
12.	Innovativeness	0.0769NS
13.	Risk taking ability	0.1501*
14.	Status of watershed	0.1299*
15.	Group cohesiveness	0.1211NS
16.	Group communication	0.1241NS
17.	Group leadership	0.7835**
18.	Team work	0.1221NS
19.	Group norms	0.1501*

\* and \*\* indicate significance of values at P=0.05 and 0.01, respectively

NS=Non-significant

variables were found significant at 0.01 level of probability. Hence, the null hypothesis was rejected and empirical hypothesis was accepted for these five variables and vice-versa for the other fourteen variables. More number of trainings undergone, frequent contacts with the officials of line departments, more usage of non-chemical inputs and more exposure to mass media and acquiring information from different formal and informal sources will have a cumulative effect to form an impression on overall effect through implementation of NRM activities. These characteristics act as bedrock to think consistently and understanding the intricacies of various NRM practices.

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## REFERENCES

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**Rahman, Z.M.** and Yamao, M. (2006). Farmers' attitude towards participatory resource management for sustainable farming development - A Study from Bangladesh.

**Chandran, M.K.** and Chackacherry, G. (2008). Assessment of people's participation under watershed development programme in the state of Kerala, India. *Internat. J. Rural Mgmt.*, **4** : 87-102.

**Golya Naik, R.** (2008). Peoples participation in watershed development programme and its impact. Ph.D Thesis University of Agricultural Sciences, Bangalore, KARNATAKA (INDIA).

**Bhawani Shanker Dadheech.,** Sisodia, S.S. and Sharma, C. (2008). Factors affecting farmers participation in watershed development activities. *Indian Res. J. Extn. Edu.*, **8**(1):69-70.

**Gupta, B.S.,** Jitendra, C., Thomas, M. and Kakran, M.S. (2010). Extent of participation of beneficiaries in the different micro-agro eco systems of Ghorbae watershed area in Shahdol district of Madhya Pradesh. *Indian Res. J. Extn. Edu.*, **10**(2):113-115.

**Nanthakumaran, A.** and Palanisami, K. (2010). Farmer participation on water management in the tank irrigated systems in Tamil Nadu. *Internat. Conference on Sustainable Built Environ. (ICSBE)*, Kandy, 13-14 December. 90-97.

**Vidhyanand, H.M.** (2004). A Study on extent of participation and decision making by farm women in agriculture and homestead gardening in selected district of Karnataka. M.Sc. (Ag.) Thesis, University of Agricultural Sciences, Bangalore, KARNATAKA (INDIA).

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