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## Aswani Kumar

Research Scholar, Agricultural Extension, C.S.A.U.A. & T., Kanpur, Uttar Pradesh, India

## HC Singh

Professor, Extension Education, C.S.A.U.A. & T., Kanpur, Uttar Pradesh, India

## Birendra Kumar

Assistant Professor, Agril. Economics & Statistics, C.S.A.U.A. & T., Kanpur, Uttar Pradesh, India

## Bhartendu Yadav

Teaching Associate, Agril. Economics & Statistics, C.S.A.U.A. & T., Kanpur, Uttar Pradesh, India

## Asha

Research Scholar, Agricultural Extension, C.S.A.U.A. & T., Kanpur, Uttar Pradesh, India

## Status of agricultural technology management agency (ATMA) in district Barabanki

Aswani Kumar, HC Singh, Birendra Kumar, Bhartendu Yadav and Asha

### Abstract

In Barabanki district of Uttar Pradesh 250 respondents were studied on their faced constraints and suggested measures over technology adopted in rice crop by PPS and Random sampling method. Results stated that the majority of trained farmers (60%) and untrained farmers (69.60%) had overall medium knowledge about improved paddy cultivation technology and farmers had knowledge with respect to farm school (0.95MS) and ATMA (0.84MS) about ATMA functions. It was suggested that proper information dissemination of the services from government side like ATMA must be made used-to for the farmers for improving socio-economic condition of rural India.

**Keywords:** ATMA, knowledge, technology and agriculture

### Introduction

Growth in agriculture is vital in order to ensure fairness is food and nutritional security in the rural areas. The thrust placed on small holder farmer is fair and visionary agriculture research education and extension are said to be the most critical for promoting farm productivity enhance income amongst various types of government spending. Agriculture extension system bridges the gap b/w research labs to a farmers' field however. The Indian agriculture is at the turning point today. The agricultural growth has powerful leverage effects on the rest of the economy and all the three basic objectives of economic development of the country, viz. poverty alleviation, output growth, and price stability are the best contribute by the growth of the agricultural sector. Agricultural Technology Management Agency (ATMA) is a registered society responsible for more effective and efficient dissemination of available agricultural technologies at district level. Socio-economic status is a combined measurement of economic and social position of an individual or a group in relation to others in the society. It has a profound role in determining one's accessibility to the common resources, livelihood pattern, household food & nutritional security etc. Therefore, knowledge is found to be must for better growth and sustainability. So, keeping this fact in view a study is being conducted To, study the knowledge about functions of ATMA-by-ATMA farmers and paddy crop technology of ATMA and Non-ATMA farmers in Barabanki district of Uttar Pradesh.

### Methodology

Probability Proportion to Size (PPS) method was adopted for the study of 125 ATMA farmers (trained) and 125 non-ATMA farmers (untrained) picked from the 16 designated villages (the list of beneficiaries from the two blocks namely Banki and Nandaura, received from the ATMA office, Barabanki), a total of 250 respondents. Survey was conducted and accomplished with a well-structured and pre-tested interview schedule to gather information from the respondents. Data collected was analysed and results were drawn with the help of suitable statistical tools.

### Research Findings

Findings under the taken objectives is being presented below

### Corresponding Author:

#### Bhartendu Yadav

Teaching Associate, Agril. Economics & Statistics, C.S.A.U.A. & T., Kanpur, Uttar Pradesh, India

**Table 1:** Responses according on respondents' understanding of the use of advanced paddy growing technology

S. No.	Components of Knowledge	ATMA Farmers	Non- ATMA Farmers
		Mean Score	Mean Score
1	Use of high yielding variety	0.85	0.73
2	Preparatory Tillage	0.83	0.76
3	Nursery Management	0.79	0.74
4	Transplanting	0.91	0.79
5	Use of chemical fertilizer	0.81	0.57
6	Water management	0.74	0.65
7	Weed management	0.76	0.69
8	Plant Protection	0.86	0.74
9	Disease	0.90	0.69
10	Harvesting	0.78	0.71
11	Threshing	0.81	0.64
12	Winnowing	0.73	0.69
13	Storage	0.85	0.72

Table No. 1 shows that the majority of the trained farmers had knowledge of transplanting, with a mean score (0.91), followed by disease (0.90), plant protection (0.86), use of high yielding variety (0.85), storage (0.85), preparatory tillage (0.83), use of chemical fertilizer (0.81), threshing (0.81) nursery management (0.79), harvesting (0.78), weed management (0.76), water management (0.74), and winnowing (0.73) in that order. Similar to how most untrained

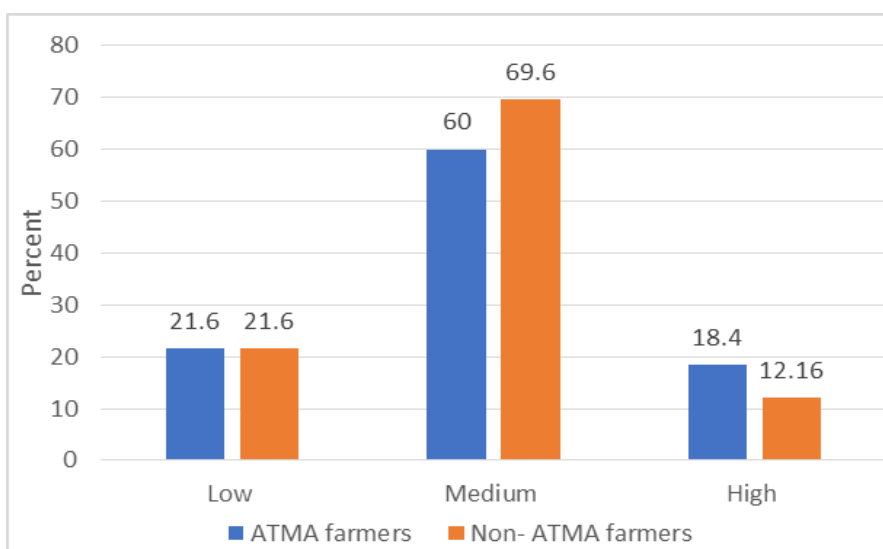
farmers, with their mean score (0.79), were knowledgeable about transplanting, preparatory tillage (0.76), plant protection (0.74), nursery management (0.74), use of high yielding variety (0.73), storage (0.72), harvesting (0.71), winnowing (0.69), disease (0.69), weed management (0.69), water management (0.65), threshing (0.64), and use of chemical fertilizer (0.57) were all scored in that order.

**Table 2:** Distribution of respondents according to their general understanding of new methods for cultivating paddy

S. No	Categories	ATMA farmers		Non- ATMA farmers	
		Frequency	Percentage	Frequency	Percentage
1	Low (Scores less than 19)	27	21.6	27	21.6
2	Medium (Scores less than 19 to 28)	75	60	87	69.6
3	High (Scores 28 and above)	23	18.4	11	12.16
Total		125	100	125	100

Table 2 makes clear that most farmers in the trained group (60%) had a medium level of knowledge, while only 21.6% had a low level and 18.4% had a high level. When it came to enhanced paddy crop technology, most farmers in the untrained group (69.6 percent) had medium understanding, followed by 21.6 percent who had poor knowledge, and just

12.16 percent who had the greatest knowledge. Farmers in the trained group also demonstrated a greater level of expertise. This could be because of the taught farmers being exposed to information via ATMA's on-farm path. Lacking this chance, unskilled farmers demonstrated less familiarity with this technology.



**Fig 1:** Distribution of respondents according to their general understanding of new methods for cultivating paddy

**Table 3:** Distribution of ATMA farmers according to their understanding of how ATMAs work

S. No.	Component body of ATMA	ATMA
		Mean Score
1	ATMA (Agricultural Technology Management Agency)	0.84
2	FACs (Farmers Advisory Committees)	0.62
3	BTT (Block Technology Team)	0.76
4	Farm School	0.95
5	Trainees/ Beneficiaries	0.79
6	Commodity Interest Group / Farmer Interest Group (CIG/ FIG)	0.68
7	Other Functions	0.79

Table 3 reveals that many of the trained farmers with their mean score (0.95) possessed knowledge about farm school followed by Agricultural Technology Management Agency (0.84), other functions (0.79), trainees/ beneficiaries selection

procedure (0.79), Block Technology Team (0.76), Commodity Interest Group / Farmer Interest Group (0.68), and FACs (Farmers Advisory Committees) (0.62), respectively.

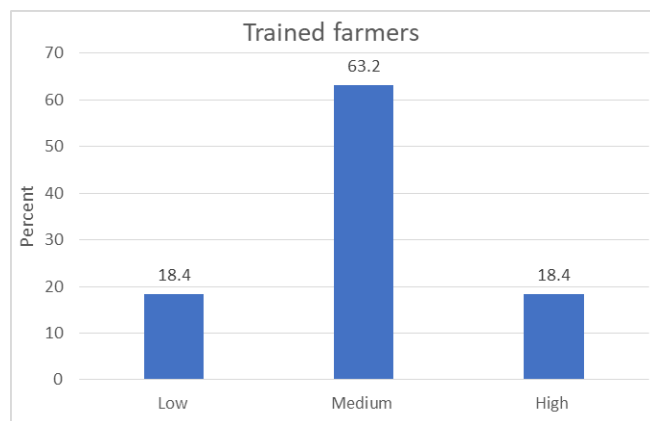
**Table 4:** Distribution of ATMA farmers according to their general understanding of how an ATMA works.

S. No	Categories	ATMA farmers	
		Frequency	Percentage
1	Low (Scores less than 30)	23	18.4
2	Medium (Scores less than 31 to 44)	79	63.2
3	High (Scores 43 and above)	23	18.4
Total		125	100

Mean = 41.66, S.D.=32.3

The understanding of trained farmers regarding ATMA functions is shown in Table 4. According to Figure 2, 18.4% of trained farmers had a high degree of understanding of ATMA operations, while the bulk of contaminated farmers (63.2%) fall into the medium group, followed by 18.4% of them in the low category.

winnowing (0.69), disease (0.69), weed management (0.69), water management (0.65), threshing (0.64), and use of chemical fertilizer (0.57) were all scored in that order. Farmers in the trained group also demonstrated a greater level of expertise. This could be because of the taught farmers being exposed to information via ATMA's on-farm path. Lacking this chance, unskilled farmers demonstrated less familiarity with this technology. Similar data is also shown by Kumar (2017) [6].



**Fig 2:** Distribution of ATMA farmers according to their general understanding of how an ATMA works.

**Interpretation of the Results**

Table No. 1 shows that the majority of the trained farmers had knowledge of transplanting, with a mean score (0.91), followed by disease (0.90), plant protection (0.86), use of high yielding variety (0.85), storage (0.85), preparatory tillage (0.83), use of chemical fertilizer (0.81), threshing (0.81) nursery management (0.79), harvesting (0.78), weed management (0.76), water management (0.74), and winnowing (0.73) in that order. Similar to how most untrained farmers, with their mean score (0.79), were knowledgeable about transplanting, preparatory tillage (0.76), plant protection (0.74), nursery management (0.74), use of high yielding variety (0.73), storage (0.72), harvesting (0.71),

Table 3 reveals that many of the trained farmers with their mean score (0.95) possessed knowledge about farm school, followed by Agricultural Technology Management Agency (0.84), other functions (0.79), trainees/beneficiaries selection procedure (0.79), Block Technology Team (0.76), Commodity Interest Group / Farmer Interest Group (0.68), and FACs (Farmers Advisory Committees) (0.62), respectively. The understanding of trained farmers regarding ATMA functions is shown in Table 4. According to Figure 2, 18.4% of trained farmers had a high degree of understanding of ATMA operations, while the bulk of contaminated farmers (63.2%) fall into the medium group, followed by 18.4% of them in the low category. Pandey, S. *et al.*, 2020 [7] showed that more than a third of respondents (36.23%) had a positive attitude toward the agricultural department's extension system, with a mean attitude score of 3.63, but only 25% of respondents had a positive attitude toward the technology transfer system. Field employees had a negative view of the department's services at a rate of 28.58 percent, with just 7.66 percent holding a neutral view and 2.53 percent having the most negative view.

**Conclusion**

- The majority of trained farmers had knowledge in respect of transplanting (0.91MS) and disease (0.85MS) about improved paddy cultivation technology. Whereas the majority of untrained farmers had knowledge in respect of transplanting (0.79MS) and preparatory tillage

- (0.76MS) about improved paddy cultivation technology
- The majority of trained farmers (60%) and untrained farmers (69.60%) had overall medium knowledge about improved paddy cultivation technology.
  - The majority of trained farmers had knowledge with respect to farm school (0.95MS) and ATMA (0.84MS) about ATMA functions.
  - The majority of trained farmers (63.2%) had overall medium knowledge about ATMA functions.

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