



# CONSTRAINTS UNDER ATMA EXTENSION SYSTEM AND SUGGESTIONS FOR ITS BETTER PERFORMANCE: AN EXPLORATIVE STUDY OF STAKEHOLDERS OF ATMA IN ANDHRA PRADESH, INDIA

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## Abstract

In India Agricultural Technology Management Agency (ATMA) is a huge public extension system, which is try to converge various extension service providing agencies, research institutes, NGOs, and other such agencies at district level with the farming community. The need of farmers' organization has grown importance in this connection. Recognizing the importance of the group led extension approach ATMA has developed several common interest groups and strengthening the existing groups in several ways. ATMA works through block technology teams (BTT) comprising Block technology managers and assistant technology managers, who are the actual extension functionaries from ATMA. Every extension work, group led extension, convergence and coordination from other departments etc has done by them. In this study attempt has been made to identify such groups along with the all extension functionaries from ATMA and present the constraints faced by them along with the suggestions opined for existing working condition of ATMA. This study was conducted in Andhra Pradesh state; three districts were taken into consideration for the data collection. Six common interest groups were identified and all members were interviewed for the purpose and all BTT members from three districts were considered for data collection. Total 188 (121 farmers and 67 extension functionaries of ATMA) respondents opined their views; which are systematically analyzed and presented in this paper. It was found that sporadic visits of the extension functionaries and lack of confidence in operating effective group without external support are the major constraints faced by the farmers. ATMA extension functionaries are facing inadequate conveyance allowances, lack of adequate time to keep in touch with CIGs followed by extension persons under ATMA were not trained as trainers are the prime most constraints faced by them. Farmers suggest to provide them with market led extension and also they suggest to their co farmers not to waste opportunities to get trained from the extension functionaries. Extension functionaries significantly suggested to make ATMA as a permanent body and to provide financial power to organize extension programs.

**Key words:** constraints of ATMA, suggestions for ATMA, group led extension, ATMA convergence.

## Introduction

About a decade ago, in order to reform the public sector agricultural extension system and to increase its relevance, accessibility, and efficiency in knowledge sharing among various actors, players, and stakeholders, Agricultural Technology Management Agency (ATMA) was introduced as a pilot program (1998-2003) in 28 districts (DAC, 2005). Following a positive feedback from the pilot implementation (IIM, 2004), the ATMA model was scaled up across 251 rural districts in 2005 and throughout the country in 2007 (Reddy and Swanson,

2006) presently 614 Agricultural Technology Management Agencies (ATMA) have been established at the District level. ATMA through its' block technology team (BTT) has attempted to encourage greater linkages between extension services and the research institutions, as well as group-led extension by forming farmer interest groups or common interest groups. Group led extension is an approach to disseminate agriculturally important technologies and information for the development and empowerment of the farmers or the villagers by successful utilization of benefits from group synergy and group dynamics. It aims to develop local skills and empower them to solve their own problems. Based on the existing

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situations, resources, demands and socio economic parameters variety of groups are establishing under ATMA. There is no limitation for ATMA to make and strengthen all socially accepted groups by the villagers. These common interest groups include self help groups, farmer interest groups, food security groups, rythu mitra groups (farmers clubs), etc. such variety of groups and the actual extension functionaries of ATMA *i.e.* block technology team members were studied and analyzed about constraints they have been facing with ATMA and opined suggestions to improve future performance of ATMA system .

### Materials and methods

The study was conducted in Andhra Pradesh state due to its exposure to ATMA since pilot stage *i.e.*, 1998 under NATP and it has highest number (49 out of 302 in India) of Farmers' organizations by 2014. So this state has purposively selected for the study. ATMA has pilot tested in twenty eight districts as four districts from seven states where Andhra Pradesh is one of them. From 2005 ATMA has scaled up to cover all districts. During the year 2005-06, 10 districts, another 8 districts during the year 2006-07 and the left over 4 districts were covered during 2007-08 resulting in coverage of entire state under the ATMA scheme; one from each phase three districts have been randomly selected for this study. Chittoor from phase one, Nellore from phase two and East Godavari from phase three districts have selected for the study. According to Andhra Pradesh reorganization Act 2014 presently there are 10 districts in the Andhra Pradesh state so only those ten districts have been considered for random selection. Frequency, percentage and Garrett ranking method used to measure the response. As per the data available from Commissionerate of Agriculture of Andhra Pradesh, all districts are having farmers groups. On par discussion with ATMA management committee, active groups were identified and two groups from each district were randomly selected for this study. Whole group members were considered for study.

### Results and discussion

By considering all common interest groups, there are 121 respondents under study. Among them majority (26.45%) are having middle level schooling (6<sup>th</sup> to 8<sup>th</sup> class) followed by primary school level (21.49%). Illiterates occupy 19%. Most of the respondents (63.63%) belong to other backward casts followed by schedule castes (20.66%). Majority (67.76%) of their primary occupation is agriculture followed by goatery (19%). More than half (54.54%) of they don't have subsidiary

income, somehow (35.53%) they have dairy as a subsidiary income source. The major purpose of group led extension is to have a good link between the extension system and the farming community and encourage farmer to farmer extension. When we consider the extension preferences of the respondents, majority (24%) of them relay on progressive farmer followed by mass media (16%) and extension personnel (12.4%) and so on. It is the good indication from this study is shows the farmer to farmer extension has been improved as the members relay on group leader for useful information. According to this study sporadic visit of the extension functionaries from ATMA to the groups makes them difficult to perform the group activities effectively was the foremost constraints faced by the members. It was ranked one with 63.62 of garret mean score followed by too tight schedule of the members especially farmers at peak

**Table 1:** Constraints faced by the members of CIGs under ATMA (n=121)

Sl. No.	Constraint	Garrett Mean score	Rank
1	Too tight schedule of farm activities	61.93	2
2	Heterogeneity in group	39.91	5
3	Lack of confidence	59.25	3
4	Conflicts among the members	59.18	4
5	Sporadic visits of Extension worker from ATMA	63.62	1

Neelam, 2016

**Table 2:** Distribution of ATMA Extension functionaries about constraints faced by them under ATMA program (n=67)

S.No	Constraint	F	%
1	Inadequate financial support under the ATMA scheme	8	8.08
2	Involvement of ATMA functionaries in the schemes other than ATMA	6	6.06
3	Lack of external trainer in close proximity	11	11.11
4	Manpower shortage in other departments	3	3.03
5	Un-time release of fund.	10	10.10
6	Lack of delegation of authority to the block level functionaries.	16	16.16
7	Voices of extension functionaries have been often neglected.	8	8.08
8	Inadequate conveyance allowances.	18	18.18
9	Delay of funds from centre	2	2.02
10	Too many vacancies in ATMA	17	17.17

\* Results obtained from multiple responses Neelam, 2016

**Table 3:** Distribution of ATMA Extension functionaries about the constraints faced by the in facilitating group led extension under ATMA (n=67).

S.No	Constraint	F	%
1	Lack of confidence among the farmers in the group.	3	1.31
2	Heterogeneity of interests	2	0.87
3	Lack of knowledge on basics of group formation	16	7.01
4	Lack of knowledge on group to the group facilitator	19	8.33
5	Irregularity of the members	8	3.5
6	Less cooperation among members	3	1.31
7	Dependency of the members over others	6	2.63
8	Lack of awareness among the farmers about group approach.	7	3.07
9	Heterogeneity in opinions	5	2.19
10	Lack of transport facilities for rural areas	23	10.1
11	Lower levels of participation	9	3.94
12	Internal conflict	3	1.32
13	Extension personnel are not trained as trainers.	31	13.6
14	Lack of adequate time to keep in touch with groups	36	15.8
15	Unavailability of production inputs at the farmer's doorstep.	19	8.33
16	Political hindrance	11	4.86
17	Farmers showing lack of interest in attending farm school.	21	9.21

\* Results obtained from multiple responses

agricultural work seasons make them difficulty in participation at group activities; it was ranked two with 61.93 garret mean score. Lack of confidence in operating effective group without external support, internal conflicts among members and the heterogeneity in members of CIGs were the rest of the constraints faced by them. Constraints faced by the 121 members were represented along with their Garret mean scores in table 1.

Extension functionaries of ATMA were responded for constraints they faced with the existing ATMA system; among them, inadequate conveyance allowances, salary as the more serious constraint since they need to travel a lot in rural areas where inefficient transport systems. Followed by, too many vacancies under ATMA make them busy with other activities and to cover additional service areas and lack of authority to manage extension work, no financial power to arrange extension activities could make them dissatisfaction in work. Further perceived constraints were sorted out along with

respective frequency and percentage values reported in table2.

Further, while they facilitating group led extension functionaries of ATMA faced lot of constraints and those constraints perceived by them represented under table 3. It was apparent that most (15.8%) of them perceived that lack of adequate time to keep in touch with CIGs under ATMA followed by extension persons under ATMA were not trained as trainers (13.6%).

Farmers and extension functionaries were reported loads of constraints they faced with the existing performance of ATMA system. Which must be treated to get better results from ATMA, for that respondents were seek to provide suggestions; sixty seven BTT members were opined their suggestions to improve the performance of ATMA. Those suggestions are presented in the following table 5. It is highly opined by them to make ATMA as a separate autonomous body and giving the financial authority to BTT rather ADA from the state department of Agriculture and allied sectors. Further they have suggested making regularize the jobs of extension functionaries under ATMA, giving complete authority to them in selection of beneficiaries without political interference. Furthermore, in time release of funds, provision of SIM cards with subsidized tariff, provision of conveyance allowances, etc. were suggested by the extension professionals for betterment of ATMA working climate so that the performance of program.

Out of 121, sixty four members were given suggestions to develop ATMA program to perform still better, and to make ATMA program more meaningful to them. The suggestions provided by the members about ATMA program was represented in table 5. Out of five suggestions, provision of market led extension and market information by the extension functionaries was suggested by the most (29.68%) of members followed by tours to the other states to be enhanced. ATMA usually arranges study tours to the farmers to have first hand information and to get direct observation of many innovative farming practices throughout the country; farmers perceived they were very useful and suggested to arrange these efforts more often. Furthermore they have suggested to provide Information regarding natural farming, financial support to the CIGs by ATMA and informing them about diverse agricultural products.

The members of CIGs under ATMA were mostly farmers; they gave suggestions for the benefit of farming community too. After analyzing their suggestions, most of the members suggested to the co farming community not to waste opportunities and always try to participate

**Table 4:** Distribution of the ATMA professionals based on the suggestions provided by them for effective performance of ATMA

S.No	Suggestions by the ATMA Functionaries for Betterment of ATMA	F	%
1	ATMA extension worker's job should be regularised	60	11.3
2	Complete authority should be given to BTMs and ATMs to select beneficiaries	53	10
3	Make ATMA as a separate autonomous body	63	11.9
4	Timely release of funds	23	4.34
5	Monitoring must be enhanced	12	2.26
6	Job enrichment of ATMA staff's	16	3.01
7	Sufficient salary should be given	19	3.58
8	State department of Agriculture authority on ATMA should not be there	38	7.16
9	Encouragement and provision of training for organic farming practices and natural farming practices	13	2.45
10	FAC should be free from political interference	6	1.13
11	More fund should be given to ATMA to improve potential allied sectors	4	0.75
12	extension teaching aids should be given to ATMA extension functionaries	17	3.2
13	EPF, insurance cutting should be implemented as mentioned in the ATMA guidelines	5	0.94
14	Every year 10percent salary should be hiked	8	1.54
15	Retired persons and old age persons should not be recruited in ATMA	14	2.69
16	Regularization of job and promotions should be given to staff	48	9.06
17	BTTs head shouldn't be an ADA from state dept. of agriculture.,(s)he should be recruited separately or promoted from ATMA	22	4.15
18	Vehicle allowance should be given since all villages are not connected through public transport system	19	3.58
19	ATMA specific sim cards with free Mobile phone calls facility	21	3.96
20	Proper Duty certificate has to be given	2	0.37
21	Monitory authority should be given to BTT rather ADA from the state dept.	54	10.18
22	Timely review the performance of staff and incentives should be provided	13	2.45

**Table 5:** Distribution of the members of CIGs based on their suggestions to improve ATMA program (n=64)

S.No	Suggestions by farmers	F	%
1	Tours to other states has to be enhanced	18	28.125
2	Market information, market led extension service need to be enhanced	19	29.6875
3	Information regarding natural farming and organic cultivation also should provided by ATMA	11	17.1875
4	Financial support to the common interest groups form ATMA	10	15.625
5	Provision of information on diverse crops, innovative ideas should provided	6	9.375

in trainings, demonstrations arranged by the extension or any developmental agencies. Further, they suggested to get informed from multiple authentic sources and try innovations. Furthermore they have suggested changing the farming style in tune with the changing environmental and world scenario and finally they suggested do not blindly follow other farmers in choice of produce, think logically and differently in production of agricultural produce to avoid glut in production. These suggestions along with respective frequencies and percentages were represented in table 6.

**Table 6:** Distribution of the farmers based on their suggestions to the co farming community (n=32)

S.No	Suggestions by the Farmers to the co Farming community	F	%
1	Get informed from multiple sources	6	18.75
2	Try innovative ideas to make good profits	4	12.5
3	Adopt recent methods of production in tune with the changing world	3	9.375
4	Participate in demos trainings and field schools to gain knowledge., don't waste opportunities	16	50
5	Get informed from the authentic sources of information.,	2	6.25
6	Don't blindly follow others; think to be different in farm produces to avoid glut production	1	3.125

## Conclusion

Lack of training in group facilitation for extension functionaries is one of the major problem need to address by the sufficient policy changes for ATMA. Capacity building in the form of motivational trainings is essentially required from ATMA to improve the performance of group led extension. Intensive training of extension functionaries

and exposure visits of CIG members should be a regular practice to infuse greater volume of morale and self confidence among both of them. The trainings from SAMETI and MANAGE must be strengthened, planning for continuous training must be conceived by the policy makers to keep extension functionaries and farmers abreast with the technology, communication, morale and self confidence. Further, the suggestions by the extension functionaries and farmers need to consider in obtaining the best from the stakeholders. Financial convenience to the extension functionaries must be addressed to improve the timely extension work. In time release of funds, salaries and conveyance allowances need to look over to improve morale of the stakeholders.

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