

Analysis of Constraints Faced by the Agricultural Extension Personnel in the State of Andhra Pradesh and Suggestions to Improve their Managerial Abilities

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ABSTRACT: Present study was undertaken, to study the Constraints faced by the Agricultural Extension Personnel in the management of different activities of department and to seek their valuable suggestions based on practical experience to overcome the constraints for efficient and improved managerial abilities. Conducted in Andhra Pradesh State, Godavari Region. A total of 160 Agricultural Extension Personnel response collected. A total of 22 constraints were identified, which are further treated with Garette Mean Score and ranks are assigned under 3 categories. 8 constraints under Technical Category, 8 Under Administrative Category and 6 under Others Category and a total of 17 suggestions given by the agricultural Extension Personnel.

Keywords: Agricultural Extension Personnel, Managerial Abilities, Garrett's ranking technique, Constraints, Suggestions.

INTRODUCTION

Extension services is seen as public goods and financed by the public sector in most of the countries. Many organizations are actively involved in providing agricultural extension services to the farming in the country (Patil *et al.*, 2019). In the organizational set up of State Agriculture Department of Andhra Pradesh the agricultural extension personnel are the key agents to implement the different developmental programme as they work as a connection between the farmers as well as higher authorities in hierarchy and the government. The main concern in the management of human resources is the improvement in the performance of the people working in the organization with a view of increasing their efficiency (Mishra *et al.*, 2011). An agricultural extension personnel is charged with a variety of roles to perform, for the development of Agrarian community. As with an increasingly dynamic work nature, organizations began to search for an advanced management and leadership approaches to meet the developmental needs of the employees and organizations (Kim *et al.*, 2013). The performance of an organization depends on the organization climate and how best its employees were clear about their roles and responsibilities (Bortamuly *et al.*, 2018). For effective and efficient working of the system the problems faced

by the agricultural extension personnel in performing their job role must be assessed and necessary solution for such identified constraints must be sought, which enables the agricultural extension personnel to achieve better managerial abilities and perform great in their assigned jobs. The study tried to reveal the constraints faced by the agricultural extension personnel to improve their managerial abilities and Suggestions to perform better in their job roles.

Objective: Present study was undertaken with following objectives

To study the Constraints faced by the Agricultural Extension Personnel in the management of different activities of department and to seek their valuable Suggestions based on practical experience to overcome the constraints for efficient and improved managerial abilities.

METHODOLOGY

In the view of above objective of the study, the present research study was conducted in Andhra Pradesh State, Godavari Region is purposively selected. The ex-post facto research design is utilized for the study according to (Kerlinger, 1968), ex-post facto research is a systematic empirical enquiry, in which the researchers do not have direct control over variables because their manifestations have already occurred. At first, a list of

functioning Agricultural Extension Personnel was obtained from the office records of the Agricultural Department of the state government working under respective districts of Godavari region. There are 4 Different Hierarchical levels in the Agricultural Extension Personnel, from each level 40 individuals are selected randomly 20 from each District to make up a total of 160 sample size from all the four levels.

The agricultural extension personnel were asked to enlist the constraints faced by them in improving their managerial abilities and suggestions to perform better in their job roles during the pilot study. the constraints faced by them and suggestions given by them were recorded, screened, corrected, some improvements added and deleted during pre-testing of the interview schedule, from review of literature and expert consultation followed by pre testing. Garrett's ranking technique (Garrett and Woodworth 1969) given by Henry Garette was used to prioritize the constraints faced by the agricultural extension personnel and suggestions to improve their managerial abilities and to perform better in their job roles. The constraints and suggestions were explained in the ranks and average score. The table below shows how the percent position of each rank was converted into score using the garret's table. For each constraint and suggestion, the scores of each individual respondent were added together and then it was divided by the total number of respondents for whom scores were added. Thus, average score for each constraint and suggestion was ranked by arranging them in the descending order.

$$\text{Percent Position} = \frac{100(R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij} = Rank given for the i^{th} item by the j^{th} respondent.

N_j = Number of items ranked by the j^{th} respondent.

RESULTS AND DISCUSSION

A. Constraints faced by the Agricultural Extension personnel

The results regarding to constraints faced by the agricultural extension personnel to improve their managerial abilities and to perform better in their job roles were analysed and were presented in the Table 1 and Fig. 1.

From the table it can be found that a total of 22 constraints were identified, which are further treated with Garette Mean Score and ranks are assigned under 3 categories. 8 constraints under Technical Category, 8 Under Administrative Category and 6 under Others Category.

1. Technical constraints: In Technical Constraints majorly 8 constraints are considered, based on Garette Mean Score the ranks are assigned, it is evident that, Insufficient technical staff facility at ground level with Garette Mean Score of 71.38 was the most important Technical Constraint ranked 1 in the Technical Constraints category and also 1 in Overall Constraints followed by lack of advanced laboratory and storage facilities with Garette Mean Score of 54.49 ranked 2 in the Technical Constraints category and also 3 in Overall

Constraints, Non-availability of vehicle for extension work with Garette Mean Score of 53.95 ranked 3 in the Technical Constraints category and also 4 in Overall Constraints, Lack of Infrastructural facilities like computer, internet connection and printer to ground level staff with Garette Mean Score of 52.61 ranked 4 in the Technical Constraints category and also 5 in Overall Constraints, Technical issues with Applications, Network issues and bugs in software's with Garette Mean Score of 51.17 ranked 5 in the Technical Constraints category and also 6 in Overall Constraints, No provision for distribution of farm mechanization tools on individual basis with Garette Mean Score of 50.30 ranked 6 in the Technical Constraints category and also 9 in Overall Constraints, Insufficient supply of inputs and subsidies with Garette Mean Score of 49.99 ranked 7 in the Technical Constraints category and also 10 in Overall Constraints and finally Insufficient training to improve the technical knowledge of staff with Garette Mean Score of 49.87 ranked 8 in the Technical Constraints category and also 12 in Overall Constraints. These results are finding in similar with Gardharia *et al.* (2011); Chauhan and Chauhan (2012); Ukamaka (2015); Bahua (2016); Aliyu and Umar (2019); Ranjan *et al.* (2019)

2. Administrative constraints: In Administrative Constraints majorly 8 constraints are considered, based on Garette Mean Score the ranks are assigned, it is evident that, Lack of Administrative & auxiliary staff with Garette Mean Score of 61.39 was the most important Administrative Constraint ranked 1 in the Administrative Constraints category and also 2 in Overall Constraints followed by Lack of meeting halls and residential accommodation with Garette Mean Score of 51.10 ranked 2 in the Administrative Constraints category and also 7 in Overall Constraints, Non-availability of funds at critical time and low budget allocations with Garette Mean Score of 50.37 ranked 3 in the Administrative Constraints category and also 8 in Overall Constraints, Lack of authority to take decisions in critical time at ground level issues with Garette Mean Score of 49.98 ranked 4 in the Administrative Constraints category and also 11 in Overall Constraints, More reporting time & Review meetings deteriorating quality work with Garette Mean Score of 49.82 ranked 5 in the Administrative Constraints category and also 13 in Overall Constraints, Red-tapism caused due to unnecessary rules and regulations with Garette Mean Score of 49.31 ranked 6 in the Administrative Constraints category and also 14 in Overall Constraints, Delay in policy making and decision implementation with Garette Mean Score of 48.98 ranked 7 in the Administrative Constraints category and also 15 in Overall Constraints and Less number of administrative and soft skill training programmes with Garette Mean Score of 48.56 ranked 8 in the Administrative Constraints category and also 16 in Overall Constraints. These results are finding in similar with Gardharia *et al.* (2011); Chauhan and Chauhan (2012); Ukamaka (2015); Bahua (2016); Aliyu and Umar (2019); Ranjan *et al.* (2019).

3. Other constraints: In Other Constraints majorly 6 constraints are considered, based on Garette Mean Score the ranks are assigned, it is evident that, Excessive workload disturbing personal life with Garette Mean Score of 46.15 was the most important Other Constraint ranked 1 in the other constraints category and also 17 in Overall Constraints followed by Personal targeting in the work-related issues with Garette Mean Score of 45.68 ranked 2 in the Other Constraints category and also 18 in Overall Constraints, Lack of proper study at ground level before implementing a scheme or programme with Garette Mean Score of 42.38 ranked 3 in the Other

Constraints category and also 19 in Overall Constraints, High targets, short time deadlines with low staff facilities with Garette Mean Score of 42.08 ranked 4 in the Other Constraints category and also 20 in Overall Constraints, Promotion policy issues with Garette Mean Score of 41.61 ranked 5 in the Other Constraints category and also 21 in Overall Constraints and Political pressure with Garette Mean Score of 39.84 ranked 6 in the Other Constraints category and also 22 in Overall Constraints. These results are finding in similar with Gardharia *et al.*, (2011); Chauhan and Chauhan (2012); Aliyu and Umar (2019).

Table 1: Constraints faced by the Agricultural extension personnel.

Sr. No.	Problems	Percent Position	Garette Table Value	Garette Mean Score	Overall Rank	Category Rank
Technical						
1.	Insufficient technical staff facility at ground level	2.27	88	71.38	1	1
2.	Lack of Infrastructural facilities like computer, internet connection and printer to ground level staff	6.82	79	52.61	5	4
3.	Non-availability of vehicle for extension work	11.36	74	53.95	4	3
4.	lack of advanced laboratory and storage facilities	15.91	70	54.49	3	2
5.	Insufficient supply of inputs and subsidies	20.45	66	49.99	10	7
6.	No provision for distribution of farm mechanization tools on individual basis	25.00	63	50.30	9	6
7.	Insufficient training to improve the technical knowledge of staff	29.55	61	49.87	12	8
8.	Technical issues with Applications, Network issues and bugs in software's	34.09	58	51.17	6	5
Administrative						
9.	Lack of Administrative & auxiliary staff	38.64	56	61.39	2	1
10.	More reporting time & Review meetings deteriorating quality work	43.18	53	49.82	13	5
11.	Lack of meeting halls and residential accommodation	47.73	51	51.10	7	2
12.	Non-availability of funds at critical time and low budget allocations	52.27	49	50.37	8	3
13.	Red-tapism caused due to unnecessary rules and regulations	56.82	47	49.31	14	6
14.	Lack of authority to take decisions in critical time at ground level issues	61.36	44	49.98	11	4
15.	Delay in policy making and decision implementation	65.91	42	48.98	15	7
16.	Less number of administrative and soft skill training programmes	70.45	40	48.56	16	8
Others						
17.	Political pressure	75.00	37	39.84	22	6
18.	Excessive workload disturbing personal life	79.55	34	46.15	17	1
19.	Personal targeting in the work-related issues	84.09	30	45.68	18	2
20.	High targets, short time deadlines with low staff facilities	88.64	26	42.08	20	4
21.	Lack of proper study at ground level before implementing a scheme or programme	93.18	21	42.38	19	3
22.	Promotion policy issues	97.73	12	41.61	21	5



Fig. 1. Constraints faced by the Agricultural extension personnel.

Suggestions to improve the managerial abilities of Agricultural Extension personnel: The results regarding to suggestions given by the agricultural extension personnel to improve their managerial abilities and to perform better in their job roles were analysed and were presented in the Table 2 and Fig. 2.

From the table it can be found that a total of 17 suggestions given by the agricultural Extension Personnel were identified, which are further treated with Garette Mean Score and ranks are assigned, it is evident from the table that, Recruitment of extra staff or provide apprentice like support through diploma and degree students with Garette Mean Score of 67.84 was the most important Suggestion given by the agricultural Extension Personnel and ranked 1 followed by Increase the storage facilities and subsidies on location basis with Garette Mean Score of 59.49 ranked 2, continuous capacity building training to conducted with Garette Mean Score of 53.39 ranked 3, Vehicle should be provided for extension works and also provision TA & DA with Garette Mean Score of 51.50 ranked 4, Arrangement of frequent ToT sessions with scientists with Garette Mean Score of 50.29 ranked 5, Provide more freedom of work and decentralized decision-making authority with Garette Mean Score of 50.04 ranked 6, No interference of political people in the duties for effectiveness of schemes with Garette Mean Score of

49.47 ranked 7, Minimize the unnecessary reporting time and review meeting to enhance quality work time with Garette Mean Score of 49.26 ranked 8, Fund allocation should be intime and sufficient with Garette Mean Score of 48.86 ranked 9, Decision and policy making with effective route mapping, location specific and prior to season with Garette Mean Score of 48.19 ranked 10, Workload should be minimized with Garette Mean Score of 48.04 ranked 11, Location based skill training should be given with Garette Mean Score of 48.00 ranked 12, Develop more user-friendly applications and resolve server issues with Garette Mean Score of 47.49 ranked 13, Job chart should be given for effective work and results with Garette Mean Score of 46.94 ranked 14, Establishment of vertical and horizontal communication with staff with Garette Mean Score of 45.87 ranked 15, Maintenance of state level farmer database for future implications with Garette Mean Score of 45.46 ranked 16 and Promotion should be given on seniority basis only with Garette Mean Score of 39.88 ranked 17. These results are finding in similar with Kumar and Sailaja (2010); Sezgin *et al.* (2010); Chauhan and Chauhan (2012); Kavad and Pandya (2015); Ukamaka (2015); Bahua (2016); Aliyu and Umar (2019); Ranjan *et al.* (2019); Sabir *et al.* (2019); Shah *et al.* (2021); Suleiman *et al.* (2021).

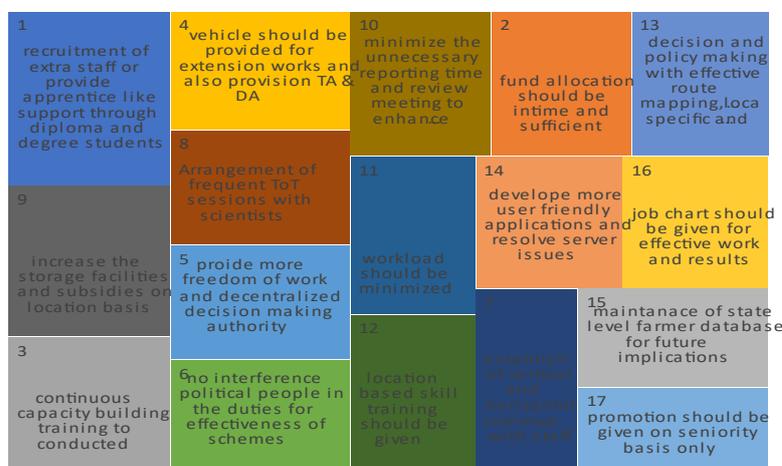


Fig. 2. Suggestions to improve the managerial abilities of Agricultural Extension personnel.

Table 2: Suggestions to improve the managerial abilities of Agricultural Extension personnel.

Sr. No.	Suggestions	Percent Position	Garett Table Value	Garett Mean Score	Rank
1.	Recruitment of extra staff or provide apprentice like support through diploma and degree students	2.94	86	67.84	1
2.	Fund allocation should be intine and sufficient	8.82	76	48.86	9
3.	continuous capacity building training to conducted	14.71	71	53.39	3
4.	Vehicle should be provided for extension works and also provision TA & DA	20.59	66	51.50	4
5.	Provide more freedom of work and decentralized decision-making authority	26.47	62	50.04	6
6.	No interference of political people in the duties for effectiveness of schemes	32.35	59	49.47	7
7.	Establishment of vertical and horizontal communication with staff	38.24	56	45.87	15
8.	Arrangement of frequent ToT sessions with scientists	44.12	53	50.29	5
9.	Increase the storage facilities and subsidies on location basis	50.00	50	59.49	2
10.	Minimize the unnecessary reporting time and review meeting to enhance quality work time	55.88	47	49.26	8
11.	Workload should be minimized	61.76	44	48.04	11
12.	Location based skill training should be given	67.65	41	48.00	12
13.	Decision and policy making with effective route mapping, location specific and prior to season	73.53	38	48.19	10
14.	Develop more user-friendly applications and resolve server issues	79.41	34	47.49	13
15.	Maintenance of state level farmer database for future implications	85.29	29	45.46	16
16.	Job chart should be given for effective work and results	91.18	24	46.94	14
17.	Promotion should be given on seniority basis only	97.06	14	39.88	17

CONCLUSIONS

From the study it found that a total of 22 constraints were identified, In Technical Constraints majorly 8 constraints are considered, they are Insufficient technical staff facility at ground level followed by lack of advanced laboratory and storage facilities non-availability of vehicle for extension work, Lack of Infrastructural facilities like computer, internet connection and printer to ground level staff, Technical issues with Applications, Network issues and bugs in software's, No provision for distribution of farm mechanization tools on individual basis, Insufficient supply of inputs and subsidies and finally Insufficient training to improve the technical knowledge of staff. In Administrative Constraints majorly 8 constraints are considered, they are Lack of Administrative & auxiliary staff, Lack of meeting halls and residential accommodation, non-availability of funds at critical time and low budget allocations, Lack of authority to take decisions in critical time at ground level issues, More reporting time & Review meetings deteriorating quality work, Red-tapism caused due to unnecessary rules and regulations, Delay in policy making and decision implementation and Less number of administrative and soft skill training programmes. In Other Constraints majorly 6 constraints are considered, they are Excessive workload disturbing personal life, Personal targeting in the work-related issues, Lack of proper study at ground level before implementing a scheme or programme, High targets, short time deadlines with low staff facilities, Promotion policy issues, Political pressure.

It also revealed that, a total of 17 suggestions given by the agricultural Extension Personnel were identified, they are Recruitment of extra staff or provide apprentice like support through diploma and degree students, Increase the storage facilities and subsidies on location basis, Continuous capacity building training to conducted, Vehicle should be provided for extension

works and also provision TA & DA, Arrangement of frequent ToT sessions with scientists, Provide more freedom of work and decentralized decision-making authority, No interference of political people in the duties for effectiveness of schemes, Minimize the unnecessary reporting time and review meeting to enhance quality work time, Fund allocation should be intine and sufficient, Decision and policy making with effective route mapping, location specific and prior to season, Workload should be minimized, Location based skill training should be given, Develop more user-friendly applications and resolve server issues, Job chart should be given for effective work and results, Establishment of vertical and horizontal communication, Maintenance of state level farmer database for future implications and Promotion should be given on seniority basis only.

FUTURE SCOPE

The study on analysis of constraints faced by the agricultural extension personnel in the state of Andhra Pradesh and suggestions to improve their managerial abilities will help the state governments and central governments to make detailed research work on the problems faced by agricultural extension personnel at different levels and will help them to frame an integrated framework for improvement of their managerial skills or abilities or efficiency by conducting various technical, administrative and soft skill trainings, workshops and other developmental sessions. This study can be utilised to study the Constraints and Suggestions of agricultural allied sectors extension personnel also.

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Conflict of Interest. None.

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