

Influence of Profile characteristics of Village Agricultural workers on Role Performance in Odisha

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ABSTRACT

Aim: To study the personal, psychological, communication and professional characteristics of Village Agricultural workers (VAWs).

Study design: Analytical research design was adopted to use facts or information already available to make a critical evaluation

Place and Duration of Study: Nine districts of Odisha were randomly selected from major three revenue administrative divisions Cuttack, Berhampur and Sambalpur between first week of December 2019 to first week of February 2020.

Methodology: Village Agricultural Workers (VAWs) of Odisha state served as the population for the study. As many as 728 VAWs in the selected nine districts constituted the sampling frame. After the discussion with the experts and various limitations of the researcher, 40 per cent of the VAWs from the sampling frame were chosen for the study. Thus, the final sample size comprised of 292 (40% of 728) VAW respondents. The method of proportional allocation in stratified sampling procedure was adopted for the selection of respondents. VAWs from each selected district were selected randomly following proportional allocation. Based on the literature, a total of 13 characteristics were taken to document the profile of the Village Agricultural Workers (VAW) who were working in state agricultural department.

Results: The results indicated that most of the Village Agricultural workers (VAWs) were middle aged (73.63%), male (66.44%) had formal education up to intermediate level (72.94%). Professional characteristics revealed that almost four-fifths (79.80%) have service experience of 6-14 years and had medium level (76.37%) of training exposure. Most (57.16%) of the VAWs had area of jurisdiction under 14 to 22 villages and mostly (87.67%) visiting 3 to 4 times a week. Study found that 78.08 percent of VAWs had high orientation towards extension profession with majority (78.08%) of VAWs perceiving neutral organizational climate in agricultural offices and 64.38% are having medium level of organizational commitment. Psychological characteristics revealed that 66.78 percent of VAWs have medium level of self-confidence with moderate job satisfaction (64.38%) and moderate leadership ability (79.11%). Communication characteristics of VAWs shows moderate level of Communication competence of VAWs (64.38%). Role performance analysis shows that majority of VAWs has medium (70.55%) level of role

performance.

Conclusion: The analysis of these profile characteristics could be crucial in understanding efficiency of state department, agricultural offices and VAWs' own individual career development. It could be crucial for policymakers in preparing appropriate interventions to enhance role performance of VAWs through training programs.

Keywords: [Village Agricultural Workers, Role performance, profile characteristics, training]

1. INTRODUCTION

Agriculture has been the most crucial sector for ensuring food and nutritional security in India having biggest share in GDP of India. Agriculture continues to provide employment to more than half of total work force and plays an important role in socio-economic fabric of India. Our current population is nearing to 130 crores which is growing annually at 1.08%. This rapid growing population puts enormous pressure upon the farming system in which majority of rural population is engaged. It is realized that greater participation of development beneficiaries in decision making leads to better results. Rural development is the strategy which enables specific group of people, poor rural women and men, to gain for themselves and their children more of what they want and need [1].

Agriculture sector in India is always evolving and posing several challenges like average size of land holdings, poor socio-economic condition of farmers, inadequate use of technology, improper management of irrigation, disastrous consequences of hazards, inadequate infrastructure and policies leading to slow agricultural growth [4]. Further lack of mechanization, improper agricultural marketing, inadequate storage and credit facilities, problems of price stabilization and overloaded public extension system are other challenges before agricultural sector. One of the main reasons for low agricultural productivity in India has been lack of integration among researchers, agriculture supervisors and adoption of innovations on the part of the client system. In order to achieve a high level of production, it is not only enough to develop farm innovations, but also it is necessary to transfer the farm technology from research system to ultimate farmer users. Hence, effective and efficient extension work is an important prerequisite for enhancing adoption of agricultural innovations and practices among the farmers.

Present extension approaches are involving target communities in setting up development goals and priorities. Since a long time, agricultural extension services have been the important component of rural development efforts. They have contributed to the reduction of hunger and poverty, increased adoption of improved technologies, and increased productivity and capacity of their beneficiaries [2]. Agricultural extension is a system that facilitates access of farmers or their organizations to new knowledge, information and technologies and promotes interaction with research, education, agri-business, and other relevant institutions to assist them in developing their own technical, organizational and management skills and practices [3]. The Agricultural Extension has undergone various transformations and modification in its approach and application. As a result, today the traditional agricultural extension approach, i.e., top-down, supply and technology-driven, no longer appears to be an appropriate model. Participatory extension approach allowing farmers and agribusinesses to play a significant role in planning and implementing extension services.

With changing government policies, demand and supply characteristics of technology, and marketing reforms, agriculture extension system is facing more opportunities together with challenges. Some of the major challenges faced by Public Extension in India are it is burdened with non-extension duties, lack of qualified public extension professionals, extension professional's unwillingness to work in remote areas, focus on State priorities, public agricultural extension delivery is neglected. Further, there are certain challenges to the public extension system like insufficient number of extension personnel, lack of practical training of personnel, ineffective linkages among extension organizations and

agricultural research institutions, lack of adequate transport facilities and certain other organizational problems like diverse duties of agricultural extension worker [5]. Further, wide area of jurisdiction of extension workers, limited training and exposure, changing information needs of farmers and limited use of Information Communication technologies (ICTs) are other challenges of extension system in India.

Extension worker is the key focal point in performing all primary functions related to facilitating learning, extending enriched knowledge and upgraded technologies in non-formal educational settings for improving agricultural productivity and farm income. They are the crucial link between agricultural policymakers, agricultural research, education and training, non-governmental organizations and private stake holders. Four broad roles were determined for grass root workers which are Technical role, Input Supply & Quality control, Extension & Training role and Managerial roles [6]. Role performance of the **extension workers** at the grass root levels is an important criterion for evaluating the effectiveness of an organization and also to know their level of performance and delineate the factors responsible for it. Employee's performance refers to an act of fulfilment of the requirement of a given job i.e., the manner in which an employee carries out his/her job efficiently [7]. Enhancing role performance of Grassroot workers is necessary as it gives clarification regarding different circumstances in field situation, increased trust of farmers upon themselves, increased motivation of farmers, knowledge regarding group behaviour dynamics and increased empathetic attitude.

Odisha one of the eastern coastal state of India has number of challenges like variable climatic conditions as well as frequent natural calamities like drought and cyclones added with poor irrigation facilities, large number of populist schemes, low productivity in crops, lowest farmer's income etc. making it the second poorest state in India with large number of below poverty line (BPL) people. In Odisha, Village Agricultural Workers (VAWs) is the lowermost unit of the state department organizational structure. **These socio-political as well as tough variable climatic situation in agricultural system of Odisha poses a challenging task for VAWs to outperform their roles. Farmers have expressed the lack of regular visits by VAWs as well as Assistant Agricultural Officers (AAOs) to the villages from block offices due to their remote locality as a serious constraint in the flow of agricultural information. Mismanagement in handling the queries or needs of farmers is also a grievance in many department offices. [20] Unless the employees are well informed about their performance and also their strong and weak points, it's very difficult for them to improve their level of performance [14].** So, study of profile characteristics including role performance of the Village agricultural workers in the grass root levels is an important criterion for evaluating the effectiveness of state department towards farming community. With changing scenario, timely assessment of role performance of VAWs becomes an essential task, so that needs and gaps can be identified and necessary improvements can be carried out. Thus, in the present study, the profile characteristics along with the analysis of their role performance of Village Agricultural Worker of Odisha state agricultural department is chosen in order to gain firsthand knowledge regarding organizational work and efficiency and development in the area of jurisdiction. Further, Role performance of VAWs as well as different grassroot extension workers varies from case to case. This may be due to variation in profile characteristics. Study of profile characteristics might help in further studies upon enhancing role performance of VAWs and planning management interventions for it.

2. METHODOLOGY

2.1 Research Design

Analytical research design was used to fulfill the purpose of the objectives of investigation and also to use facts or information already available to make a critical evaluation. The use of analytical methods was made to ascertain the determinants of role performance by specifying relationship among variables.

2.2 Sampling Procedure

The Village Agricultural Workers of the locale of the study constituted the sampling frame. There were as many as 728 VAWs in the selected nine districts. To ensure manageable and reasonable sample 40 per cent of the VAWs from the sampling frame were selected. Total 292 (40% Of 728) VAW were selected. The method of probability proportional to size sampling was adopted in selection of respondents. Thus, Table 1 clearly indicates that from Cuttack division, a total of 90 VAWs; from Sambalpur division, 97 VAWs and from Berhampur division, 105 VAW respondents were selected for the study based on proportional allocation method; giving a total sample size of 292 respondents.

Table 1: Selection of respondents

S. No.	Division/District	No. of Gram Panchayats	Total no. of VAWs	No. Of VAWs selected
A	Cuttack Division			
1	Jajpur	311	60	24
2	Puri	230	96	38
3	Khordha	168	69	28
B	Sambalpur Division			
1	Dhenkanal	199	72	29
2	Anugul	209	90	36
3	Sundargarh	262	78	32
C	Berhampur Division			
1	Kalahandi	314	110	44
2	Koraput	226	96	38
3	Malkangiri	108	57	23
Total	9 Districts	1614	728	292

2.3 Variables under study

The focus of the study was to study the profile characteristics of VAWs and factors which could be possibly be responsible for their role performance. Thus, the profile characteristics variables of the VAWs for the present study were selected on the basis of extensive review of literature related to the extension workers, role performance and job performance after thorough consultation with experts. The personal, professional, psychological and communication characteristics of the VAWs were taken for the study. These included VAW's age, education, gender, service experience, area under jurisdiction, training exposure, organisational climate, orientation towards extension profession, frequency of visits, organisational commitment, self-confidence, leadership ability, job satisfaction and communication competence.

2.4 Statistical tools and techniques used

Appropriate statistical tools such as frequency, percentage, mean, standard deviation was used to analyse the data. The final categories were made on the basis of mean and standard deviation.

3. RESULTS AND DISCUSSION

3.1 Age

Age can play an important role in Village Agriculture Worker's role performance with respect to experience and responsibility. The data regarding age composition of VAWs has been presented in table 2. It reveals that majority of VAWs (73.63%) belonged to the middle age category (31 to 35 years), followed by 14.38 percent old aged category (36 & above). Further, there were only 12 per cent of VAWs who were in young age category (30 years and less).

The result found that majority of them are middle aged, matured for the job and in economically active stage of life. They will be expected to perform tedious, skillful and time bound work load with efficient decision making, time management and communication skills. Reason behind this result might be joining services in younger age after completing intermediate schooling and preference of Odisha staff selection board to recruit VAWs from a younger age. Less number of young aged people in VAWs shows that young people have lesser interest in joining agricultural grassroot services as well as less recruitment in recent years. Study of [8] also revealed that majority of KVK staff (80%) fell under middle age category.

3.2 Education

Education status of Village Agricultural workers has been presented in Table 2. It shows that maximum VAWs (72.94%) had education up to intermediate level (Class 12pass) followed by 24.32 per cent VAWs belonged to graduate level of education. Only 2.74 % of VAWS are middle school pass outs. Majority of VAWs has intermediate level of education as in recent 2 decades eligibility of joining VAW has been kept as CLASS 12 pass. **Less preference of village youth towards higher educational studies might also be the reason for joining extension services in young age after 12th.** Study of [9] on level of job satisfaction of extension workers in Odisha also revealed that majority of respondents educated up to intermediate is 57.5 percent.

3.3 Gender

Gender of Village Agricultural workers has been presented in Table 2. It shows that two-thirds (66.44%) of VAWs are males and one-third of VAWs are female. Government of Odisha have provisions of reservation of 33 percent of women in government jobs which has substantially increased the women workforce in recent years in Odisha. Women VAWs are also key to the development of women farmers and house makers related to agriculture and allied sectors. Large number of women VAWS are observed in Cuttack division of Odisha in comparison to northern Sambalpur and Southern Berhampur division.

3.4 Service experience

Service experience of VAWs has been presented in table 2. It shows that almost four/fifths (79.80%) of VAWs had medium level of service experience (6-14 years) followed by 10.27 percent of VAWs having low-level experience and 9.93

percent of highly experienced VAWs in service. The reason for a smaller number of high experienced VAWs result might be mass recruitment of VAWs in last two decades, as well promotion of VAWs to Agricultural overseer after certain age. The average mean service experience is nearly 10 years which suggests VAWs would be keen to explore higher potential and more sophisticated work which ultimately will influence performance at work. Studies like [10] and [11] also revealed that majority of extension workers had medium level of experience.

3.5 Training exposure

Training exposure of VAWs has been presented in table 2. It shows that majority of VAWs are having medium training exposure (76.37 %) and high training exposure (14.38%) following which only 9.25 percent of VAWs had low training exposure. Majority of VAWs had done initial inservice training in centres in Bolangir and Dhenkanal **where they were updated and upgraded with working of Departmental roles**. Further many VAWs has attended trainings held by Senior training officers in RITES Dhenkanal training centres and Rangeilunda training centre mostly on topics of plant protection measures specific to crops of that particular region, usage of fertilizers, understanding new structural changes in agricultural policy, **understanding the knowledge and application of computer system viz data entry, data submission** etc. These are particularly of One to five days duration. Remote area VAWs of Malkangiri, Koraput were regularly trained in own offices by senior agricultural offices. These trainings are notified time to time by department itself. This result brings the fact that VAWs required a highly structured and optimum duration of training in many aspects of extension, work ethics, basics of agricultural problems, market led extension which can enhance their role performance in a rapidly changing agricultural world. Contrastingly, study of [11] for studying role performance found that majority received high level of training. Study is in line with [6] which found that, more than half (54%) of the Agricultural advisors have medium level of in-service training experience.

3.6 Area under jurisdiction

Area under jurisdiction of VAWs has been presented in table 2. It shows that majority (57.16%) of VAWs had middle level area of jurisdiction followed by greater than one-fourth of VAWs (26.03%) having smaller area of jurisdiction and 16.78 percent has larger area of jurisdiction. It is worth noting that Standard deviation is higher than 8 villages in this data due to huge differences in VAWs areas of jurisdiction in different places of Odisha due to its geographical features. Areas under Cuttack and Sambalpur division has **higher number of villages** under VAWs as they were highly populated, agriculturally developed, small area and villages present in nearby proximity whereas South Odisha area under Berhampur division has difficult terrain, climate extremes, huge land area (Kalahandi, Malkangiri are among largest area districts in Odisha) which result in **lesser number of villages** under VAWs as they were in far proximity from VAWs residence or office. Study is in line with [6] which found that 78 percent (middle level) of agricultural advisors had 6-8 villages under their jurisdiction.

3.7 Organizational Climate

Organizational climate as perceived by VAWs has been presented in table 2. **The scale developed by [15] were used for quantitatively measuring organizational climate.** It shows that majority of VAWs almost three/fourths (74.38%) in number perceive neutral organizational work climate followed by 15.75percent perceive favourable organizational work climate and 9.93% perceive unfavourable climate in office work. This result clearly states that there is a clear structure, line of command among the agricultural offices under department of agriculture. During investigation it was also found that

VAWs have greater independence of visiting farmers in their jurisdiction area. It was also found during investigation that coordination among VAWS is very much favourable among themselves. Organizational Climate is an important criterion for higher role performance where the incumbent has clear cut understanding of roles, decision making and authority. This result is not in line with study of [10] in her study of job satisfaction, decision making and job performance of assistant horticulture officers where nearly 40 percent perceived more favourable organizational climate in Karnataka.

3.8 Orientation towards Extension profession

The data in Table 2 reported that 78.08 percent has high orientation towards extension profession followed by 12.67 percent having very high orientation towards extension profession and finally 9.25 percent of VAWs having low orientation towards extension profession. **The scale developed by [12] was used for quantitatively measuring orientation towards extension profession.** During investigation it was observed that many VAWs has mixed attitude towards extension profession, majority of them perform their duties having definite understanding about extension principles attached to it and further many of them just perceive it as a job which has to be done. VAWs must have the attitude to serve the rural community as a national duty which is an important factor for role performance. Result suggest Majority of VAWs believe on helping society for the betterment of farmers. Result is nearly in line with the [12] where he revealed 90 percent of agricultural officers in Kerala has high orientation towards extension profession.

3.9 Frequency of Visits

Frequency of visits of VAWs is shown in table 2. It shows that huge majority of VAWs (87.67%) visits farmers three to four days (medium) a week followed by 8.22 percent who visit one to two days a week (low) and mere 4.11 percent who visit five to seven (high) days a week. This result states that VAWs has to give certain amount of time in office works, visit senior officers for review meetings regularly and conduct training demonstration in many times. During investigation, many VAWs also revealed travelling to far villages is difficult **to be conducted regularly** and prior scheduling of time with farmer was also required to be done.

3.10 Organizational Commitment

Organizational Commitment of VAWs has been presented in table 2. **The scale developed by [16] were used for measuring level of organizational commitment.** It shows that majority (64.38%) has medium level of organizational commitment followed by more than one-fifth (20.55%) having high organizational commitment and 15.07 percent having lower commitment towards organization. This suggests majority understands the importance of agriculture sector in their local area and works hard for their prosperity. As most of them are middle aged they are ready to take up any work in field as communicated by senior agriculture officers. Study of Jyothi also revealed 66.34 percent have medium level of organizational commitment. Study is in line with findings of [6] where he found that 64 percent of agricultural advisors have medium level of job commitment.

3.11 Self Confidence

Self-confidence of VAWs has been presented in table 2. **The scale developed by [17] was used for quantitatively measuring self-confidence of the respondents.** It shows that little more than two-thirds of VAWs has medium level of self-confidence followed by 17.12 percent of VAWS having high level of self-confidence and 16.10 percent having low self-

confidence. This result reflects that majority of farmers feels confident to carry out work in different situations in field. In investigation it was found that majority of them are having medium level service experience and middle aged they are confident and carryout multifarious works of department. Study of [11] is not in line with the study as it was revealed that almost 80 percent of agriculture officers had high self-confidence.

3.12 Leadership ability

Leadership ability of VAWs has been presented in table 2. The scale developed by [18] was used for quantitatively measuring leadership ability of VAWs. It shows that almost four-fifths (79.11 %) of VAWs have medium level of leadership ability followed by 11.30 percent having high leadership ability and remaining 9.59 percent having low leadership ability. Reason behind this VAWs do not always get complete authority to take initiatives decisions related to farmers and farm problems. They regularly have to take insights of Senior Agricultural Officers for many works. Young and middle aged VAWs are yet to have sufficient experience to carry out any initiative in rural setting with rural farmers. Lack of technical know-how of many emerging technologies and market knowledge also an important factor of medium leadership skill among VAWs.

3.13 Job satisfaction

Job satisfaction of VAWs has been presented in table 2. The scale developed by [19] were used for quantitatively measuring job satisfaction of VAWs. It shows that almost two-thirds (64.38%) of VAWs have medium job satisfaction in department followed by 18.15 percent having lower job satisfaction and 17.47 percent having higher job satisfaction. It is worth noting that majority (82.53%) of VAWs has medium and low job satisfaction. In investigation maximum number VAWs complained of low salary, more paper work, less appreciation, multifarious works and less technical competency. Job satisfaction is an important criteria of role performance. VAWs of Cuttack division mostly complaint of high political indulgence, fights and bickering with farmers and low coordination with senior officers. Studies are in line with [8], [6] and [13] who also opined that majority of extension workers had moderate job satisfaction.

3.14 Communication competence

Communication competence of VAWs has been presented in table 2. It shows that 64.38 percent of VAWs have medium level of Communication competence followed by 23.29 percent of VAWs having high communication competence and only 15.07 percent has low level of communication competency. This is due to reason that most of the VAWs have been more and less residing in local area near to area of jurisdiction. Meetings with farmers in regular basis have enhanced their speaking skills as well as language competency. During investigation it is noted that most of the VAWs have moderate understanding of successfully initiating and ending discussions regarding technologies among farmers. Berhampur division VAWs has better communication competency as they regularly work with tribal people.

Table 2: Various characteristics of Village Agricultural Workers

S. No.	Characteristics	Frequency	Percentage	Mean	Standard Deviation
I	Personal characteristics				
1	Age				
	Old Aged (41 & above)	42	14.38	35.57	5.02
	Middle Aged (31-35)	215	73.63		
	Young aged (30 & less)	35	11.99		
2	Education				
	Graduation & above	71	24.32	NA	NA
	Intermediate	213	72.94		
	Middle school	8	2.74		
3	Gender				
	Male	194	66.44	NA	NA
	Female	98	33.56		
II	Professional characteristics				
1	Service experience				
	Long (15 years & above)	29	9.93	10.02	4.37
	Medium (6-14 years)	233	79.80		
	Small (less than 6 years)	30	10.27		
2	Training exposure				
	High (13 or more)	47	16.10	9.86	3.68
	Medium (7-13)	196	67.12		
	Low (6 or less)	49	16.78		
3	Area under jurisdiction				
	Large (23 or more villages)	49	16.78	36.22	8.98
	Medium (14-22 villages)	167	57.19		
	Small (0-13 villages)	76	26.03		
4	Organizational Climate				
	Favourable (34 or more)	46	15.75	29.27	3.86
	Neutral (26-33)	217	74.32		
	Unfavourable (25 or less)	29	9.93		
5	Orientation towards extension profession				
	Very High (33-40)	37	12.67	NA	NA
	High (25-32)	228	78.08		
	Low (17-24)	27	9.25		
	Very low (8-16)	0			
6	Frequency of visits				
	High (5-7 visits/week)	12	4.11	3.40	0.70
	Medium (3-4 visits/week)	256	87.67		
	Low (1-2 visits/week)	24	8.22		
7	Organizational Commitment				
	High (30 Or more)	60	20.55	26.54	3.09
	Medium (24-29)	188	64.38		
	Low (23 & less)	44	15.07		
III	Psychological characteristics				
1	Self Confidence				
	High (30 or more)	50	17.12	29.97	3.59
	Medium (27-29)	195	66.78		
	Low (26 & less)	47	16.10		

2	Leadership ability				
	High (9)	33	11.30		
	Medium (6-7)	231	79.11	6.89	1.16
	Low (upto 6)	28	9.59		
3	Job satisfaction				
	High (More than 136)	51	17.47		
	Medium (106-136)	188	64.38	120.6	15.53
	Low (less than 106)	53	18.15		
IV	Communication characteristics				
1	Communication competence				
	High (18 & more)	68	23.29		
	Medium (14-17)	188	64.38	15.75	2.18
	Low (less than 14)	36	12.33		

3.13 Role Performance of Village Agricultural workers.

Role performance of Village Agricultural workers has been shown in Table 3. It shows that majority (70.55 %) of VAWs have medium level of Role performance followed by 15.07 percent of VAWs showing low level of role performance and 14.38 percent showing high level of Role Performance. Table 4 shows that majority of VAWs have moderate understanding of skills (Technical, input & Quality control, managerial and extension & training) to perform different roles which are expected from them. VAWs from different regions are facing different challenges which affects performance. **Planned and structured training programme** can be prepared for enhancing the role performance of medium as well as low role performers. Study is in line with [6] which opined that 50.66 percent of Agricultural Assistants in Maharashtra has self-rated themselves as having medium level of role performance.

Table 3: Distribution of Village Agricultural Workers on the basis of Role Performance

S. No.	Role Performance of VAWs	Frequency	Percentage	Mean	Standard Deviation
1	High (50 or more)	42	14.38	43.79	5.66
2	Medium (39-49)	206	70.55		
3	Upto (38)	44	15.07		

Table 4: Mean indices on various areas of Role performance expressed by VAWs

SI no	Areas of Role Performance	Village Agricultural workers	
		Mean Index	Rank
1	Input Supply & Quality Control	71.06	1
2	Managerial	67.54	2
3	Extension & Training	56.28	3
4	Technical	54.79	4

Overall Role Performance index- 59.17

4. CONCLUSION

Study of various profile characteristics including Role Performance of VAWs is a major indicator of efficiency and effectiveness of agricultural department, human resource development of agriculture sector of Odisha and career development of VAWs themselves. This study shows that role performance has been moderate and requires enhancement in their role performance. This study will help understand further the determinants which significantly affect role performance of department as well as individual profile of VAWs. This will help policy makers, senior officials to prepare appropriate intervention like training programs for VAWs. Performance studies are necessary with time as every employee has to face a changing scenario in agriculture. This study will help Odisha government for fulfilling requirement of further human resource need in agriculture. Village Agricultural Workers need to be supported with standardized, certified extension manual that depicts the wide range of strategies, tools, roles and functions that are relevant for their work in different settings

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