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A scale to Measure Job Effectiveness of Village Extension Officers

M. Srinivasulu Reddy[1] and K.M. Jayaramaiah[2]

INTRODUCTION

The term job as a collection of tasks assigned to a worker. Any group of tasks whether related or not, which are assigned to an individual, constitutes his job (Lanham, 1955). The job effectiveness of workers in different industries, firms and organisations has been measured with the help of job performance chart (sengupta, 1966). Shakuntala Balaraman (1987) stressed that the job effectivenss is essential not only for organisational purpose but also for the advancement of behavioural science and it is possible to define effectiveness in a meaningful way for each managerial level, function and type of technology.

In the T & V system supported the world bank, stress has been given for professional agricultural extension work, exclusively through system training and visits, concentration of efforts, best use of available resources and continuous improvement on the job etc. The main objective of this system was to increase the agricultural production per unit of cultivable land by introducing high yielding varieties, critical inputs and through educational activities. In the present study, the qualitative aspects have been selected keeping in view of these dimensions.

a) Definition of the Universe :

Depending on theories and objectives of the T and V system and the job chart of the village extension officers (VEOs) the various dimensions covering all quantitative aspects of VEOs job were determined.

b) Collection of statements and editing

Based on the researchers wide range of discussions with extension professionals, the review of literature on T and V system and the job chart of VEOs, 47 statements were delineated under two major areas of activities viz..

(1) Extension activities carried out and farmers participation in these activities (2) Crop productction which include area covered under HYVs, consumption of fertilizers, inputs distributed as well as average yield of major crops pertaining to the period june, 1985 to May, 1986 in each VEOs jurisdiction. These statements were the edited using the criteria suggested by likert (1932) and Edwards and Kilpatrick (1948).

1. Asso. Prof., Deptt. of Extn. Education, S.V. Agricultural College, Tirupati, (A. P.).
2. Prof. & Head, Deptt. of Agril. Extension, UAS, Bangalore - 560 024, (Karnataka).

c) Selection of Scalable Statements

Out of these 47 statements, 42 statements were related to first category and 5 statements were related to second category. These were then given to 20 extension professionals of Andhra Pradesh Agricultural University and University of Agricultural sciences, bangalore and also 20 extension personnel of T and V system of Govt. of Andhra pradesh for their valuable judgement with regard to the statements relevance and importance on a 5 point continuum viz., very much relevant (VMR), much relevant (MR), relevant (R), somewhat relevant (SWR), least relevant (LR), carrying weightages of 5, 4, 3, 2, 1 respectively in the second part. After getting the responses from these 40 judges, the average score assigned to each statement was calculated by using the formula.

The calculated average value were found to be 3.4 for relevance and 3.5 for importance. After identifying the items with their average value being higher than the one's calculated, 28 statements having

$$\text{Overall average} = \frac{\text{Total score of all the items for all the judges}}{\text{Total number of items x Total number of judges}}$$

ITEMS

Sr.No.	Statement	Number	Score value REL.	IMP.
1	2	3	4	5
1.	Number of farm visits made	-	3.7	3.9
2.	Number of field visits made with farmers	-	3.8	4.0
3.	Number of group meetings held	-	4.2	3.8
4.	Number of fortnightly training programmes	-	3.6	3.6
5.	Number of weekly trainings programme participated	-	3.7	3.9
6.	Number of result demonstrations conducted	-	3.6	3.7
7.	Number of method demonstrations conducted	-	3.9	3.8
8.	Number of plant protection campaigns organised	-	4.0	3.9
9.	Number of trails conducted	-	3.8	3.7
10	Number of problems of farmers solved	-	3.6	3.6
11.	Number of farm families covered	-	3.8	3.7
12.	Number of plan of works prepared	-	3.9	3.8
13.	Number of contact farmers selected	-	3.8	3.6
14.	Number of training programme organised, for contract farmers	-	3.5	3.6
15.	Number of problems passed on to the SMS's seeking solutions	-	3.7	3.6
16.	Number of farmers motivated to adopt new ideas	-	3.6	3.8

A scale to Measure...

ITEMS

1	2	3	4	5
17.	Number of teaching aids used for educating farmers : a) Charts	-	3.8	3.7
	b) Posters	-		
	c) Specimens	-		
18.	Average number of farmers participated in group meetings	-	3.9	4.0
19.	Average number of contact farmers participated in training programmes, organised by VEO	-	3.9	3.8
20.	Average number of farmers visited to result demonstraion plots	-	3.7	3.6
21.	Average number of farmers participated in field visits	-	3.6	3.7
22.	Average number of visits made by VEO's to the demonstration plots in a month	-	3.8	3.6
23.	Average number of farmers participated in method demonstrations	-	3.7	3.6
24.	Average number of farmers visited the trial and minikit plots	-	3.6	3.8
25.	Area covered under high yielding varieties of major crops in the jurisdiction	-	3.9	3.8
	In acres			
	Kharif Rabi Summer			
	1. paddy			
	2. - - - -			
	3. - - - -			
	4. - - - -			
26.	Total Fertilizer consumption in the jurisdication (in quintals)		3.7	3.7
	N -			
	P -			
	K -			
27.	Total quantity of inputs distributed in the jurisdiction l		3.6	3.7
	a) HYV seeds (in qtls) -			
	b) Fertilizer (in tons) -			
28.	Average yield (per acre) of major crops during the previous year in the jurisdicition		3.8	3.9
	a) Paddy -			
	b) - -			
	c) - -			

an average relevance of 3.4 and above the average important value of 3.5 and above were selected and the same are presented in below.

d) Reliability of the scale :

The reliability of the scale was determined by split half method. The scale was administered to 20 VEOs in a non sample area. The scores for the odd and even numbered items of the same 20 respondents were correlated by using pearson product moment correlation coefficient which was found to be 0.60. This was corrected by using spearman's Brown formulae and obtained the reliability coefficient (rtt) of the test. The rtt was 0.75 which indicated reliability of the scale.

e) Validity of the Scale :

The validity was inbuilt in the scale itself as greatest care was taken to include all the related items to represent the universe of contents, at the time of prepartion of scale itself.

f) Administration and scoring :

The data on job effectiveness aspect were acquired directly from VEOs using the structured questionnaire. Because the questionnaire was distributed to group meetings, the researcher took advantage of the situation and explained in details the significance and improtance of the investigation to the VEOs. Equal weightage was given to ten major aspects viz., (1) extension activities carried out as well as the farmers participation in these activities and (2) crop production which includes area covered under HYVs, fertilizer consumption, inputs distribution as well as average yield of major crops. The scores were calculated separately for each aspect and then combined to obtain the job effectiveness score. The scoring pattern followed for the components of the scale is detailed below.

For the first aspect, extension activities as well as the farmers participation was taken into consideration while scoring. It was ascertained by discussion that the extension workers normally attend to 17 items of extension activities in their work, such as farm visits, field visits, demonstration etc. The number of times each one of these activities organised during the year was taken as the basis for computing the score in Extension Activities (EA). For example, if extension worker has orgaised 30 field days he could get a score of 0.3 and a total of 100 of different such activities, the scoring was 1.

The farmers participation score was computed on the basis of the number of farmers actually participated in each of the extension activities of farmers participation (FP). One score was assigned for 100 farmers participation. The cumulative participated in the extension activities organised. For example, if 150 farmers participated in fielddays and another 100 farmers participated in grop meetings the score obtained was 2.5. The extension activities and farmer's participation score

(EAFP) was thus obtained by using the formula.

EAFP = EA + FP

where,

EA = Extension Activities

FP = Farmers participation

Thus the sum of the scores on all items formed half of the values assigned in the JEs of VEOs.

The second major activity included in measuring the job effectiveness was crop production aspect which include for major sub-job activities viz., area covered under HYVs (acres), quantum of fertiliser consumption (qtls), inputs distributed (qtls) and average yield (qtls) obtained for major crops. The differential scoring pattern was followed to quantity, the crop production aspect. For the area covered under HYV, quantum of fertilizer consumption and inputs distributed, a score of one for every 100 units was assigned. Irrespective of the type of the sub-activity equal weightage was given for each one of them keeping in view the efforts of the extension worker. Also, the scoring procedure followed for the average yield of the major crop was one score for every one quintal of crop yield, this procedure was adopted since all the VEOs are working on more than one major crop.

Thus the obtained score on these 4 sub-activities of second aspect were combined to get the crop production score value as detailed below.

Cp = HYV + FC + IP + CY

where,

Cp = Crop production

HYV = High yielding varieties

FC = Quantity of fertilizer consumption

IP = Quantity of inputs Distributed

CY = Yields of major crops

Thus the crop production score obtained was the score on area concerned under HYVs, quantity of fertilizer consumption, quantity of inputs distrbuted and yields of major crops.

The job effectiveness (JE) score was obtained by summating the scores on EAFP and CP detailed as JE = EAFP + CP.

The respondents were categorised into three job effectiveness categories based on the mean and S.D. of the index scores as a measure of check.

Table 1 : Distribution of VEOs depending on their job effectiveness

Categories	Frequency	Percentage
High	25	12.50
Medium	150	75.50
Low	25	12.50
Total	200	100.00

Mean : 135.91 SD = 52.18 CV = 38.39

An examiniation of Table reveals that a large majority of VEOs were grouped under the categories of medium level of JEs, the same percentage of VEOs grouped high under and low categories of JEs was equal. The computed coefficient

of variation indicates that there is considerable variation in the job effectiveness scores of VEOs.

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We die duily, Happy those who duily come to life as well

- GEORGE MACDONALD