Indicators Contributing to the Performance of Krishi Vigyan Kendra for Sustainable Development

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ABSTRACT

The study was conducted to evaluate the work performance of Krishi Vigyan Kendra (KVKs) in Zone-VIII using ex-post facto-research design. Forty three indictors were identified by following Logical Framework Approach (LFA) and questionnaire was developed to measure the performance. The findings reported 17 performanceindicators such as problems addressed based on district diagnostic team suggestions (9.24%), approach in educational activity (8.60%), training impact (6.82%), training rationale based on Non Governmental Organizations (NGOs)and line departments (6.22%), On Farm Testfeedback (6.12%), training modules developed for rural youth and farmer (5.82%), functioning of Scientific Advisory Committee (SAC), front line demonstrations conducted, training facility in KVK, training rationale based on farmers demand, human resource development, action taken on SAC decisions, physical facilities, irrigation infrastructure, training of rural youth, impact of Front Line Demonstrations in neighboring villages, total irrigated area of KVK farm. These 17 indicators are contributing up to 84.65 per cent variance in the performance of KVKs in Zone-VIII. Mandatory activities of KVKs are uniform throughout the country and these factors contributing to the performance of KVKs in Zone-VIII can also hold good to KVK in other Zones of India. KVK activities planned and conducted based on these indicators will reduce the time lag from technology generation to its adoption in farmers' field,thus enhancing the performance of KVKs and promoting extension work and sustainable development in Agriculture.

Keywords: *Indicators, Performance, Sustainable*

INTRODUCTION

Krishi Vigyan Kendra (KVK) is an innovative organization established mainly to impart vocational skill training to the farmers and field extension workers. The KVKs were design to impart the latest knowledge to farmers through work experience by employing the principle of teaching by doing and learning by doing. Therefore mandatory activities of KVK are (a) Organizing need based vocational trainings to farmers, farm women and youths, (b) Organizing on farm tests in farmers fields to refine the recommended technologies to make them suitable to local farming situation, (c) Laying out front line demonstrations on pulses, oilseeds, cereals and fruits and vegetable crop on proven technologies in comparison with farmers practice and (d) Training field level extension workers on emerging advances in agriculture. KVKs prepare their annual action plan and implement after its approval in scientific advisory committee and annual action plan workshop organized by Zonal Co-coordinating Unit of their respective zones. These activities are to be planned based on the needs of the farmers identified through field experience, conducting District Diagnostic Team visits, Organizing Scientist Farmers Interaction sessions, feedback received through clients, Suggestion given by extension workers and farmers in scientific advisory committee meeting, demands of NGOs and other development departments working in the operational area of KVK. At present we don't know which indicator is contributing to what extent to the performance of KVK. Hence, an academic study on evaluation of KVKs-A Log Frame approach has been under taken to identify the factors contributing to the performance of KVKs in Zone-VIII.

METHODOLOGY

The study was conducted with an objective to evaluate the performance of KVKs in Zone-VIII using ex-post facto-research design. Forty five indictors were identified by following Logical

Frame Work approach (Akroyd, D., 1995, 1999 and Nagaraja, N., 2007) to measure the performance of KVKs. A structured questionnaire was developed based on these indicators. A pro-forma was developed in consultation with experts in the field of KVKs. Scientists published research papers on KVKs and grass root level functionaries having work experience in KVKs. Professional experts presented papers in seminars, conference, workshop, symposia and several other arranged events in relation to KVKs and sent to 110 judges for rating to identify the indicators of KVK performance. Indicators with relevancy weightage score of 0.66 and above have been selected for the study. Thus forty three indicators were selected and based on these indicators a questionnaire was developed and pre tested in non sample area and necessary corrections were incorporated based on pre test results. The standardized questionnaire was used to collect data from a sample size of 69 KVKs which completed three years of service to farmers in Zone-VIII. 43 KVKs have responded to our request and the data were computerized by using principal component analysis to identify indicators contributing to the performance of KVKs.

RESULTS AND DISCUSSION

There were 94 variables considered to measure performance of KVK. After preliminary computation 62 important variables were selected. Among 62 important variables 33 major contributors in association with 17 most important indicators contributing to overall performance were identified and presented in Table-1 & Fig.1. Problems addressed based on District Diagnostic Team reports are the highest contributing factor to overall performance of KVK with a variance of 9.24 per cent. The approach followed in extension education activities in KVK is next important factor with 8.60 per cent, Training impact is third important factor contributing to overall performance with 6.82 per cent, Training rationale is contributing up to 6.22 per cent, On Farm Test (OFT) feedback contributing up to 6.12 per cent, training modules developed is contributing 5.82 per cent, Functioning of Scientific Advisory Committee (SAC) is contributing up to 4.79 per cent, Frontline demonstration area conducted is influencing up to 4.51 per cent, Training facility is influencing up to 4.44 per cent. Yield levels in Front Line Demonstration (FLD) are contributing up to 4.43 per cent, Human resource development of KVK staff up to 4.10. Action taken on SAC decisions up to 4.07 per cent, Physical facilities to the extent of 3.72 per cent, status of irrigation facility to KVK farm is 3.27 per cent, Training of rural youth is up to 3.18 per cent, impact of FLDs is 2.90 per cent, and total irrigated area of KVK farm is 2.42 per cent. The cumulative variance of these 17 indicators is up to 84.65 per cent variance to measure the performance of KVK in the study Zone. These 17 indicators were identified as most important indicators to assess the performance of KVK because of the reason that they are contributingup to 84.65 per cent variance, work done as per these indicators would contribute to reduce the time lag in technology generation and its transfer to farmers and help to increase the production, productivity and income from agriculture and allied sectors on sustainable basis in the operational area of KVK. Thus it leads to the achievement of development objective or goal of KVK. Hence these indicators might be considered to assess the performance of KVK.

Table 1
Factors contributing to Overall Performance of KVK

n=43

Sl. No	Indicators	*Variable*	Score	Variance	Cumulative variance
1	Problems addressed based on district diagnostic team suggestions	No. of Front Line Demonstrations (FLD) planned based on District Diagnostic Team (DDT) feedback received	0.931	9.24	9.24
		No. of trainings planned based on DDT	0.888		
		No. of scientists participated in DDT	0.841		
		No. of farmers participated in FLD	0.814		
2	Approach in educational activity	No. of modules prepared for Extension Workers	0.900	8.60	17.84
		No. of lesson plans prepared for Extension Workers	0.900		
		No. of Self Employment Units established by rural youths	0.823		
		Total No. of farmers / Farm Women trained by KVK	0.790		
		Area under in FLD	0.744		
3	Training Impact	Impact of training on acquisition of skills by the trained farmers	0.928	6.82	24.66
		Impact of training on acquisition of knowledge of trained farmers	0.911		
		Impact of training on adoption level of farmers	0.793		
4	Training Rationale based on NGOs and line departments	No. of programmes organized based on NGO demand	0.848	6.22	30.88
		Trainings organized based on the demand of Line Departments	0.767		
		No. of demonstration units established in KVKs	0.746		
5	O.F.T. Feed back	Feedback given to extension system after conducting On Farm Test	0.886	6.12	37.00
		Feedback given to research system after conducting On Farm Test	0.879		
6	Training modules developed Rural youth and farmers	No. of modules developed based on Training Need Assessment for Rural youth	0.710	5.82	42.82
		No. of modules developed for farmers & Farm Women (FW)	0.710		
7	Functioning of SAC	No. of Scientific Advisory Committee (SAC) members participated in SAC meetings	0.884	4.79	47.61
		No. of SAC meetings conducted	0.791		
8	Front line demonstration	Total area of FLDs implemented per year	0.722	4.51	52.12
9	Training facility in KVK	No. of farm and laboratory equipments used in training programmes	0.939	4.44	56.56
10	Training rationale based on farmers demand	Training topics selected based on farmers demand	0.832	4.43	60.99
11	Human resource development	No. of refresher trainings attended by KVK Subject Matter Specialist (SMS)	0.808	4.10	65.09
		Duration of training attended by KVK SMS.	0.811		
12	Action taken on SAC decisions	[illegible]	0.770	4.07	69.16
		No. of suggestions received to conduct OFT in SAC	0.756		
13	Physical facilities	Plinth area of physical facilities established in KVK	0.754	3.72	72.88
14	Status of irrigation facility to KVK farm	Status of irrigation facilities to KVK instructional farm	0.785	3.27	76.15
15	Training of Rural Youth	Total No. of rural youth trained by KVK	0.839	3.18	79.33
16	Impact of FLDs in neigh-bouring villages	Average yield obtained in neighbouring villages around FLD village	0.501	2.90	82.23
17	Total irrigated area of KVK farm	Irrigated area of KVK farm	0.849	2.42	84.65

CONCLUSION

The findings reported that the 17 indicators contributing to the performance of KVK, Problems addressed based on district diagnostic team suggestions, Approach in educational activity, Training impact, Training rationale based on NGOs and line departments, OFT feedback, Training modules developed for rural youth and farmers, Functioning of SAC, Front line demonstrations conducted, Training facility in KVK, Training rationale based on farmers demand, Human resource development, Action taken on SAC decisions, Physical facilities, Status of irrigation facility, Training of rural youth, Impact of FLDs in neighboring villages and total irrigated area of KVK farm. These 17 indicators are contributing up to 84.65 per cent variance to the performance of KVKs in Zone-VIII. KVK activities planned and conducted based on these factors will reduce the time lag from technology generation to its adoption in farmers' field. Thus enhance the performance of KVKs and promoting extension work and development in Agriculture and livestock production in the country.

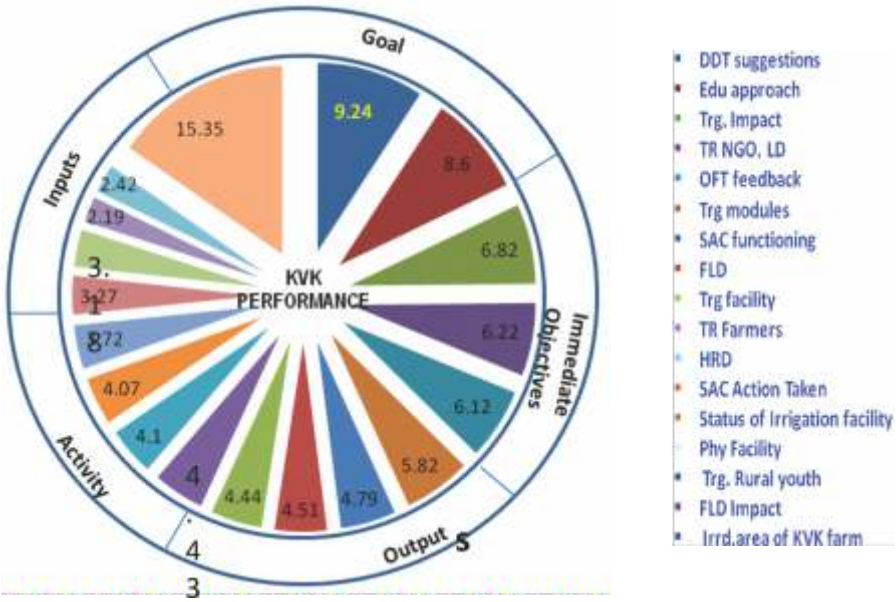

Fig. 2. Indicators contributing to overall performance of KVK

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