Performance of Public-Private-Partnership Model of Veterinary Services in West Bengal

Sanjit Maiti¹, Sujeet Kumar Jha² and Sanchita Garai³

1. Scientist (AE), NRC on Yak Dirang, Arunachal Pradesh, 2. Sr. Scientist (Dairy Ext.), Division of Dairy Ext., NDRI, Karnal, Haryana, 3. Scientist (AE), NAARM, Rajendranagar, Hyderabad, Andhra Pradesh

Corresponding author e-mail: sanjit.ndri@gmail.com

ABSTRACT

The livestock population has increased enormously, while public sector funding to the veterinary services is not adequate as per the need, then, livestock support services has been suffering a lot. To meet this inadequacy, emphasis in recent years has been shifted over to decentralize veterinary services, cost recovery, withdrawl of selected services and contractual services and encouraging Public-Private-Partnership model for veterinary services. Within this scenario, Government of West Bengal introduced educated unemployed youth as Pranibandhus (field level stakeholder of Public-Private-Partnership model of veterinary services in West Bengal) for livestock extension services round the clock at the farmers' door step. This study was conducted in the purposively selected district of Purba Medinipur of West Bengal to appraise the role performed by the Pranibandhus by three different approaches namely self- rating, beneficiary- rating approach and superior rating approach. The study covered 100Pranibandhus out of 225 Pranibandhus from all the four sub-divisions of the district. It was found that majority of the Pranibandhus were average performer in overall role performance and in each area of performance. Pranibandhus were more interested in animal breeding activities but animal rearers and Govt. officials of livestock department of the district wanted more attention in animal healthcare practices. It was also found that educational status, experience as Pranibandhu (year), cattle population of the area, communication in the organization, self perception about job responsibility and mass media exposure were the main contributory characteristics of Pranibandhus to their overall role performance.

Keywords: Public-Private-Partnership (PPP); Pranibandhus; Veterinary extension;

Due to the inefficient, poor performance and lack of manpower of public sector, privatization of veterinary services is finding acceptance in most developing countries. With in this scenario, Govt. of West Bengal introduced educated unemployed as *Pranibandhu* (PB) in the year 2001-02 under the administrative control of Paschim Banga Go-Sampad Bikas Sanstha (West Bengal Cattle Development Organisation) as the field level stakeholders of "Public Private Partnership (PPP)" model for the extending veterinary services to the livestock farmers round the clock. Along with this, they are also working as a project component of the National Project on Cattle and Buffalo Breeding. Already, about 3354 such *Pranibandhu* are working throughout the West Bengal. As these Pranibandhus are the new entrants in the veterinary and animal husbandry sector,

so, an assessment on their performance is the need of the hour. In this backdrop, this study was conducted to appraise the role performance of *Pranibandhus* with following objectives;

- i. To determine performance level of *Pranibandhus* in all spheres of veterinary services
- ii. To trace out contributory characteristics of *Pranibandhus* to their level of performance
- iii. To find out the preferred area of performance of *Pranibandhus* for better performance in future

METHODOLOGY

The study was undertaken in the purposively selected district of Purba Medinipur of West Bengal. All the four sub-divisions of the district, namely *Tamluk*,

Contai, Haldia and Egra, were selected for the present study. In all 25 Pranibandhus, 25 beneficiary farmers and 5 Block Livestock Development Officer (BLDO) as superior from each sub-division were selected, randomly, to appraise performance of PBs in the light of the perception of different stakeholders. Thus, the total sample-size happened to be 100 Pranibandhus, 100 beneficiary farmers and 20 superiors.

Role performance was operatioanlised for this study as the manner and extent in which different tasks expected from a *Pranibandhus* were performed actually in the practical situation. It was measured by using multiple approaches *i.e.* self-rating, superior rating and beneficiary rating were applied.

Data were collected personally, with the help of a pre tested structured interview schedule, and collected data were subjected to descriptive (frequency, mean, percentage) and inferential (regression, multiple regression, 't' test, 'F' test) statistics to draw meaningful conclusion. To test the mean among three rating approaches on different areas of the performance, Duncan's Multiple Range Test (DMRT) was followed.

RESULTS AND DISCUSSION

The Table 1 shows that according to self-rating approach majority of the Pranibandhus (60%) reported to have average performance followed by twenty one and nineteen percent showed good and poor performance, respectively. It was also found from the same table that according to beneficiary rating approach sixty nine percent of the *Pranibandhus* were average performer followed by sixteen percent having good performance and rest fifteen percent of the PBs showed poor performance. As far as superior rated role performance was concerned, the performance of PBs categorized as average, was sixty five per cent. However, the number of poor and good performers, was twenty five per cent and ten per cent, respectively. Maity (2002) reported that most of the Livestock Development Assistants were identified as medium performer by self rating, superior rating and beneficiary rating approach. Halakatti and Sundaraswamy (1998) and Padmavathi et al. (1998) also revealed that majority of the agricultural assistants and Mitra Kisans had a medium level of job performance.

Area wise role performance of Pranibandhus as delineated by the different rating approach: When

Table 1. Overall role performance of the *Pranibandhus* as obtained by three rating approaches

Rating approaches	Perfor le	No.	Mean	
approaches	Category Score			
Self rating	Poor	<62.77	19 (19)	
(n=100)	Average	62.77-76.80	60(60)	69.79
	Good	>76.80	21(21)	
Beneficiary	Poor	<57.28	15(15)	
rating (n=100)	Average	57.28-68.54	69(69) 6	62.91
	Good	>68.54	16(16)	
Superior rating	Poor	<50.78	25(25)	
(n=100)	Average	50.78-65.54	65(65)	58.16
	Good	65.54	10(10)	

(Values in parenthesis indicate percentage)

Pranibandhus were asked to judge themselves regarding their performance by self rating approach, it was found that majority of the Pranibandhus perceived themselves as average performer in animal breeding, animal nutrition, animal healthcare and animal management services (Table 2). But a large chunk of the Pranibandhus (56 %) thought that their performance in extension activities were good. Because, they were the field personnel for organizing calf rally, cattle fair and different vaccination programme with the help of Block Livestock Development Officers.

Beneficiary farmers of Purba Medinipur district also expressed same perception regarding role performed by the *Pranibandhus*. They thought most of the *Pranibandhus* were average performer in each area of dairy farming. Though *Pranibandhus* are neither veterinarian nor their performance up to the mark, but, beneficiary farmers were somewhat satisfied for their performance as *Pranibandhus* were available at the doorstep round the clock. Just making a phone call to their mobile, animal owner were getting some emergency service from them.

It is also interesting to see that the monitoring authority of the *Pranibandhus* i.e. Block Livestock Development Officers also certified *Pranibandhus* as average performer in animal breeding, animal nutrition, healthcare and management. But they perceived that *Pranibandhus* were performing well in extension activities of the department as *Pranibandhus* were the key person to organize, calf rally, cattle fair, vaccination

Table 2. Area wise role performance of the Pranibandhus as delineated by the different rating approach

S.	Areas of	Performance	Different rating approach (N=100)					
No.	Performance	category	Self rating approach	Beneficiary rating approach	Superior rating approach			
1	Animal breeding	Poor	18 (18)	18 (18)	30 (30)			
		Average	74 (74)	69 (69)	55 (55)			
		Good	08 (08)	13 (13)	15 (15)			
2	Animal nutrition	Poor	14 (14)	32 (32)	10 (10)			
		Average	71 (71)	42 (42)	75 (75)			
		Good	15 (15)	26 (26)	15 (15)			
3	Animal health care	Poor	11 (11)	14 (14)	20 (20)			
		Average	67 (67)	66 (66)	75 (75)			
		Good	22 (22)	20 (20)	05 (05)			
4	Animal management	Poor	04 (04)	7 (7)	25 (25)			
		Average	65 (65)	79 (79)	60 (60)			
		Good	31 (31)	14 (14)	15 (15)			
5	Extension activities	Poor	05 (05)	13 (13)	15 (15)			
		Average	39 (39)	69 (69)	30 (30)			
		Good	56 (56)	18 (18)	55 (55)			

(Values in parenthesis indicates percentage)

Table 3. Comparative analysis of areas of performance by different rating approach

S.		Different rating approaches (N=100)					
No.	Areas of performance	Self rating Mean ± S.E	Beneficiary rating Mean ± S.E	Superior rating Mean ± S.E			
1	Animal breeding	$10.94 \pm 0.141a$	$9.39 \pm 0.114b$	9.44 ± 0.443b			
2	Animal nutrition	12.99 ± 0.166 a	11.46 ± 0.146 b	11.61 ± 0.440 b			
3	Animal health care	13.81 ± 0.199 a	13.70 ± 0.212 a	$12.99 \pm 0.561a$			
4	Animal management	13.90 ± 0.172 a	12.61 ± 0.179 b	12.01 ± 0.339 b			
5	Extension and marketing activities	$17.72 \pm 0.243a$	15.76 ± 0.196 b	$14.92 \pm 0.510 \mathrm{b}$			

(Means with different superscripts in a row significantly different (p<0.05). The multiple comparisons are based on DMRT post hoc test.)

camp in each corner of the district. *Maity* (2002) also expressed the same result on the role performed by the livestock development assistant in West Bengal.

A Comparative analysis of performance of *Pranibandhus* by different rating approach is presented in Table 3. Perception of both beneficiary farmers and Block Livestock Development Officers on the performance of *Pranibandhus* in the area of animal breeding, animal nutrition and management differ significantly (p<0.05) with perception of *Pranibandhus*. Though the performance of most of the *Pranibandhus* was categorized as average (Table 2) by themselves, their superiors and beneficiary farmers but their level of perception on performance was significantly different. But, in case of animal health care services, all the three

rating approach perceived that there was no significant difference in the perception of the service rendered by the *Pranibandhus*. Though they were not specialized veterinarian but they served the animals in primary healthcare problem and in emergency round the clock. So, all the three stake holders had the same perception. *Contributory characteristics of the Pranibandhus on their performance*: To determine the contributory characteristics on the role performed by *Pranibandhus*, multiple regression analysis was applied. *Pranibandhus* themselves believed that educational status, experience as *Pranibandhus* (years) and cattle population of the area were significantly (p<0.01) contributing to their overall role performance (Table 4). According to their own perception, all the characteristics (whatever

Table 4. Multiple regression analysis: Independent variables VS. different rating approaches (N=100)

		Self rating		Beneficiary rating		Superior rating	
S.		Regression	"t"	Regression	"t"	Regression	"t"
No.	Performance	Coefficients	Values	Coefficients	Values	Coefficients	Values
		(b) Values		(b) Values		(b) Values	
X1	Age	-0.108	-0.81	-0.088	-0.95	-0.106	-1.18
X2	Educational status	5.452	5.55**	-1.297	-1.91	-1.270	-1.88
X3	Experience as PB (Years)	2.583	3.86**	2.211	4.78**	2.207	4.79**
X4	Knowledge regarding improved	-0.445	-1.46	0.049	0.23	0.038	0.18
	dairy farming						
X5	Attitude towards dairy farming	-0.295	-1.85	0.088	0.79	0.097	0.89
X6	Self perception about job responsibility	0.140	1.48	0.132	2.03*	0.128	1.98
X7	Cattle population on the area	0.001	2.78**	0.000	0.48	0.000	0.49
X8	Availability of resources	-0.002	-0.00	-0.704	-1.94	-0.669	-1.87
X9	Timeliness of availability of resources	0.445	0.96	0.112	0.35	0.089	0.28
X10	Extension Contact	0.299	1.03	-0.189	-0.94	-0.202	-1.02
X11	Mass media exposure	0.260	0.94	0.417	2.19*	0.408	2.15*
X12	Communication in the organization	0.089	0.35	1.207	6.87**	1.211	6.91**
X13	Use of extension methods	0.068	0.32	0. 0.167	1.15	0.165	1.14

 $R^2 = 0.563$

 $R^2 = 0.677$ F stat = 7.812** F s

F stat = 12.705**

 $R^2 = 0.674$ F stat = 13.69**

Note: ** significant at p < 0.01 and * significant at p < 0.05

included in the study) contributed upto 56.3 percent of their role performance and remaining 43.7 percent due to other factors which were not included in the study. They perceived that government should arranged some incentive for good work, assured their income and, then, they can performed better. But beneficiary farmers perceived that experience as Pranibandhus (years), communication in the organization (both at p<0.01), self perception about job responsibility and mass media exposure (both at p<0.05) were significantly contributing to the overall role performance of *Pranibandhus*. According to the beneficiary farmers' view all the characteristics were contributing 67.7 percent of their (Pranibandhus) performance and reaming 32.3 per cent was due other factors which are not included in the study. They also (farmers) perceived that better training can improve the scenario of performance of Pranibandhus. Similar observation also made by Maity (2002), Gogoi and Talukdar (1998) in West Bengal and North-Eastern region of India respectively. Trade et al. (1995) also expressed that educational status, extension contact and mass media exposure were significantly associated with the role performance of local leader in agricultural development. As per Block Livestock Development Officers' perception regarding the contributory characteristics of the *Pranibandhus*, experience as *Pranibandhus* (years), communication in the organization (both at p<0.01) and mass media exposure (at p<0.05) were significantly contributing to their role performance. They also perceived that all the independent variables included in the study were explaining 67.4 percent of their performance and remaining 32.6 percent was due to other factors which were not included in the study.

Preferred area of performance of Pranibandhus as delineated different stakeholders: All the stakeholders i.e. Pranibandhus, beneficiary farmers and Block Livestock development Officers were interviewed on the future expected/preferred area of role performance of Pranibandhus and the result is portrayed in Table 5. Most of the Pranibandhus expressed that they were specially trained for doing artificial insemination. So, their first preference would be on animal breeding. As they were not specialized veterinarian, then, animal healthcare got least preference from them but they were most interested in animal extension activities to organize calf rally, cattle fair and arranging vaccination and other camp.

		Different rating approaches (N=100)					
S.	Areas of performance	Self rating		Beneficiary rating		Superior rating	
No.		Index	Rank	Index	Rank	Index	Rank
		score		score		score	
1	Animal breeding	72.93	I	62.6	IV	62.93	II
2	Animal nutrition	64.95	V	57.3	V	58.05	V
3	Animal health care	69.05	IV	68.5	I	64.50	I
4	Animal management	69.50	III	63.05	II	60.05	III
5	Extension and marketing activities	69.36	II	63.04	III	59.68	IV

Table 5. Ranking of different areas of role performed by *Pranibandhus* as delineated by different rating approaches

Dairy husbandry of the Purba Medinipur district was based on zero input in terms of feed and fodder because most of the animal rearer were resource poor. So, animal nutrition got least preference from each stakeholders of the study. Beneficiary farmers were very much concerned regarding health problem of their animal and they believed that *Pranibandhus* should give more emphasis on animal health care services than the other area of performance. Still people of this district trusted on the natural services with known pedigree bull. So, preference on animal breeding got least preference.

Block Livestock Development officers also put same perception like beneficiary farmers. They thought that *Pranibandhus* would take more responsibility in animal healthcare practice. As artificial insemination is the mandate duty of *Pranibandhus*, so, their next important role should be to take care of animal breeding in the district.

Block Livestock Development officers also expected that *Pranibandhus* should take some responsibility in animal management and arranging extension camp.

CONCLUSION

An attempt was made to appraise the role performed by the *Pranibandhus* who are the field level stakeholders of Public-Private-Partnership (PPP) model of round the clock veterinary services in West Bengal. Findings of this study revealed that majority of the *Pranibandhus* were average performer in their overall role performance. It may be easily concluded that an effective Public-Private-Partnership (PPP) linkage, well equipped with knowhow and solid infrastructural back up will definitely improve the dairy husbandry scenario, thereby helping the cause of dairy development in the country, in general, and the state of West Bengal, in particular.

Paper received on : May 02, 2011
Accepted on : August 11, 2011

REFERENCES

- 1. Gogoi, M. and Talukdar, R.K. (1998). Measuring research and extension productivity of scientist of a regional research station and agricultural training centre. *J. Agril. Sc. Society of North-East India*, **11** (1):11 5-117
- 2. Hallakatti, S.V. and Sundaraswamy, B.S. (1998). Job performance of agricultural assistant in training and visit system. *Karnataka J Agril.Sc.*, **11** (2):436-440.
- 3. Maity, M. (2002). Role expectation, role performance and job satisfaction among Livestock Development Assistants (LDA) of West Bengal. Ph.D. Thesis (unpub.), N.D.R.I., Karnal.
- 4. Padmavathi, M., Reddy, M.M.K. and Reddy, M. S. (1998). Role perception and role performance of Mitra Kisans in watershed development project. *J. Res., ANGRU*, **26** (3-4):21-25.
- 5. Trade, V.J., Sawant, P.S. and Bhoite, H.S. (1995). Role performance of local leaders in agricultural development. *J. Mah. Agril. Uni.*, **20** (1):102-105.