

Criteria For Assessing Ai Service Delivery of Para-Veterinary System: Functioning of Gopalamitras in Andhra Pradesh

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Abstract

The para-veterinarians can play an important role in the privatization process of livestock service delivery system in developing countries. With this an exploratory research study was conducted in East Godavari district of Andhra Pradesh to study the delivery of livestock services delivered by the Animal Health Worker, Gopalamitra who provides AI, PD and first aid services at the doorstep of the livestock owners on payment under the centrally sponsored scheme of National Project on Cattle and Buffalo Breeding (NPCBB). 100 Gopalamitras have been selected for the study with 50 good and 50 poor performers categorized based on the number of AIs done. The study revealed that Gopalamitras cover one-third (38%) of AIs in the district with each Gopalamitra covering livestock population on an average 1098 within 1-2villages by travelling about 28kms in a day. Gopalamitras were involved in unauthorized services attending 165 cases in a month with an average annual income of Rs. 95,421 which accounted for more than 75% of their total family income. This shows the need for suitable mechanism to be developed to see that the Gopalamitras get good income to sustain their livelihoods but at the same time preventing them to attend to unauthorized services which may lead to complications. The number of AIs done and number of calves born are the good indicators to assess the success of the Gopalamitras.

Key words : AI service, delivery of livestock, gopalamitras

Introduction:

The need to establish a well-balanced livestock service delivery system^[1] through a combination of public and private actors and the efforts to equip them to deliver effective services to the farmers also deserve an enhanced attention^[2].

There is a need for strengthening the para-veterinary system and integrating the para-veterinarians into the department by creating stronger links with the veterinarians which enables a further reach by the Veterinary Assistant Surgeons (VAS) as well as enhances the quality of services provided by the para-veterinarians through strong technical support from the VAS. One of the responses that sought to remedy this situation led to the emergence of para-veterinary system

particularly, Gopalamitra in Andhra Pradesh to make the livestock services available at the door step of these livestock farmers.

Under National Government has implemented National Project for Cattle & Buffalo Breeding (NPCBB) Project, the Andhra Pradesh Livestock development Agency (APLDA) has been established for restructuring breeding operations in bovines in the country and started functioning from April 2000. APLDA at state level, with 22 DLDA at district level, is functioning to carry out the cattle and buffalo breeding activities in the state

Gopalamitras were appointed by the APLDA/ DLDA to deliver livestock services especially in remote areas where the veterinary (dispensary / rural livestock units / key village

unit) institutions are not located in the vicinity of 3 km. The operational area of Gopalamitra covers approximately one thousand female breedable bovine population. There were about 4,176 Gopalamitras working in Andhra Pradesh as extended organ of SDAH to provide the breeding and first aid services. The number of Gopalamitras operating currently in all the three divisions of EG District was 251.

Materials and Methods:

East Godavari district was selected for study due to the presence of highest number of households possessing livestock; the livestock contribution to Gross District Domestic Product is high and is one of the districts where Gopalamitras are widely spread to deliver livestock services. Based on their performance with reference to AI achievement

for the last two years i.e., 2010–2011 and 2011– 2012, a total of 100 Gopalamitras were selected proportionately from all the three divisions by taking both better achievers (50) and poor achievers (50) equally from the lists. The total sample consisted of 44, 22 and 34 Gopalamitras from Kakinada, Rajahmundry and Amalapuram divisions, respectively.

Results and Discussions

Average number of AIs done and calves born per year

The average number of AIs done by Gopalamitras in a year was about 841 and the mean number of calves born in a year was 383. The number of calves born due to AIs done by Gopalamitras ranged from 100 to 1300 in a year (Table 1).

Table: 1 Average number of AIs done and calves born per year (2011-12)

| Sl.No | Characteristic | Mean | Range |
|-------|--------------------|------|------------|
| 1 | AI done / year | 841 | 182 – 2108 |
| 2 | Calves born / year | 383 | 100 - 1300 |

Sources of income

The various sources of income for Gopalamitras are:

- Maintenance allowance of Rs. 2000 per month.
- AI service charge Rs. 30/- per AI (out of Rs. 70/-).
- Calf born incentives @ Rs. 50/- per each female calf at the end of the year.
- Promoter charges for animal insurance @ Rs. 15 – 20 per animal.
- Treatment of cases.

Average monthly income earned through authorized services and incentives by Gopalamitras

The average monthly income earned through authorized services and incentives by Gopalamitra are given in the table 2.

Through authorized services the Gopalamitras were earning about Rs. 6715 per month and most of it was through the number of AIs done and maintenance allowance paid by the DLDA. There were few Gopalamitras who were earning less than Rs. 2000 per month.

Table 2 Average monthly income earned through authorized services by Gopalamitras

| Sl. No. | Cases | Mean (Rs.) | Range |
|---------|-----------------------|----------------|---------------------|
| 1 | AI* | 2010.90 | 900 – 5250 |
| 2 | PD | 857.40 | 150 – 3000 |
| 3 | Wound dressing | 996.40 | 500 – 2000 |
| 4 | Calves born | 798 | 208 – 2708 |
| 5 | Animal insurance | 53 | 12 – 168 |
| 6 | Maintenance allowance | 2000 | - |
| | Total | 6715.01 | 1770 – 13126 |

*Excluding semen straw cost

The Gopalamitras cannot thrive only on the fee collected from the authorized services.. the main attraction for many Gopalamitras selecting this job is that they are delivering unauthorized services and also to get the social status as a doctor in the farming community. This could be one of the main reasons for Gopalamitras sticking to their jobs after joining in DLDA. It was noticed that there were only few Gopalamitras who left Gopalamitra job to join in government service.

Service charges paid by livestock farmers to Gopalamitras

Average charge collected by Gopalamitras with the range and frequency for the various services are mentioned below in the table 3.

Authorized services:

Gopalamitras are authorized to charge only Rs. 70 for AI but they charged generally more than Rs. 70 per AI. Though the deworming and vaccination services to be

provided free of cost, most of the Gopalamitras were found collecting fee for these services.

Unauthorized services:

Some of the services provided by Gopalamitras are beyond their capacity and not authorized to practice. But they are interested to earn money through providing them. Unauthorized services provided by Gopalamitras were treatment of metabolic and gynecological cases. As these services are unauthorized accurate details could not be collected. Although, the livestock farmers had no choice but to invite Gopalamitras (highly accessible compared to VAS) to attend cases which are beyond their scope, there were instances where they did more harm to the animals than good. This due to severe shortage of VASs in the area, most of the livestock farmers were rather forced to depend upon Gopalamtiras for treatment of cases.

Table 3. Service charges paid by livestock farmers to Gopalamitras

| Sl. No. | Cases | Frequency | Av. amount paid by LS farmers (Rs.) |
|------------------------------|----------------|-----------|-------------------------------------|
| Authorised services | | | |
| 1 | AI | 86 | 71.45 |
| 2 | PD | 51 | 50.78 |
| 3 | Wound dressing | 9 | 200 |
| 4 | Deworming | 20 | 5.00 |
| 5 | Vaccination | 56 | 8.85 |
| Unauthorized services | | | |
| 6 | Fever | NA | 198 |
| 7 | Mastitis | NA | 225 |
| 8 | Diarrhoea | NA | 100 |
| 9 | Dystocia | NA | 140 |
| 10 | ROP | NA | 200 |

Criteria for the success of Gopalamitras:

It was attempted to find out the characteristic which differentiate more successful Gopalamitras from the less successful ones. The association between personal characteristics and success of Gopalamitras in terms of number of cases

attended and income earned was established through chi-square test.

Gopalamitra income is taken into consideration as a success indicator as it presumed to be dependent upon the number of AIs done and number of calves born (Table 4). The chi-square analysis revealed that number of AIs done and number of calves born are

positively and significantly related to Gopalamitra income. Similarly, the total number of cases which include both AIs and calves born is also positively and significantly

associated with Gopalamitras income. It is also a good sign to notice positive association between number of AIs done and calves born.

Table 4 Criteria for the success of Gopalamitras

| Sl. No. | Attributes | Calculated value (chi-square) |
|--------------------------------|----------------------|-------------------------------|
| <i>With total no. of cases</i> | | |
| 1 | No. of AIs done | 6.84** |
| 2 | No. of calves born | 8.54** |
| <i>With no. of AIs done</i> | | |
| 3 | No. of calves born | 73.44** |
| <i>With Gopalamitra income</i> | | |
| 4 | Total family income | 10.8** |
| 5 | Total no. of cases | 6.03* |
| 6 | No. of AIs done | 45.31** |
| 7 | No. of calves born | 36.82** |
| 8 | Livestock population | 2.05 |

*significant at 5% level

**significant at 1% level

On the basis of this analysis it could be inferred that number of AIs done and calves

born will serve as good criteria to assess the success of Gopalamitras.

References

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