

Community Based Animal Health Care Model

<p>1. Summary of the product/ technology (maximum of 200 words)</p>	<p>The CBAC Model was conceived in response to the lack of awareness of scientific livestock practices and inadequate access to veterinary health services in remote tribal areas of Bihar. CBACM are typically located in or near villages, making them easily accessible to livestock owners. Community Health based Animal Health Workers (CBAHWs) can be described as community members, usually livestock keepers, selected by their own community with the collaboration of private veterinary doctors, the public veterinary service and supporting bodies (KVK), and trained to perform basic animal health and animal husbandry-related tasks in their community. The CBAHCM were established in three tribal dominated villages of Banka district (Bihar) which were operated by trained and certified local youths. Ex-post-facto approach was adopted in the study, and data were collected from randomly selected 120 livestock owners in the geographic area served by the CHACs. CBACM have been shown to have a significant positive impact on livestock health and productivity.</p>
<p>2. Is it a new technology? (Yes/No). If no, provide the details of the technology modified</p>	<p>No, it is not but modified as per the need of the community. The CBAC model is a proven and effective way to improve animal health and livelihoods in developing countries. The World Health Organization (WHO) and the Food and Agriculture Organization of the United Nations (FAO) both support the use of CBACM as a way to improve animal health and livelihoods.</p>
<p>3. IPR involved, if any (Patent/Copyright/ Industrial Design Registration/Variety/germplasm registration). Provide Filed/Granted number</p>	<p>NA</p>
<p>4. Validation procedure followed (within Institute, collaborators, multilocation/multi-site testing)</p>	<ul style="list-style-type: none"> • The CBAC model is being scaled up and validated through implementation in additional tribal villages of Banka, Kishanganj, and Katihar districts, aiming to further empower rural youth, create employment opportunities, and enhance overall livestock productivity. • Also endorsed and approved through Extension Council of BAU Sabour
<p>5. Brief description of research output/technology:</p> <p>a. Objective of the product/technology</p>	<ol style="list-style-type: none"> 1. To overcome challenges of scientific livestock farming and limited access to veterinary health services. 2. To empower the local youth with the skills and knowledge for employment opportunities

<p>b. Detailed methodology of the proposed product/technology</p>	<p>CONCEPTUAL FRAMEWORK OF THE MODEL: The CBAC model was initially implemented in five scheduled tribes (ST) dominated villages in Banka district, Bihar, under the Tribal Sub Plan Scheme under the basic principles which included:</p> <ol style="list-style-type: none"> 1. Development of local human resource: Training and certification of Community Animal Health Workers (CAHWs): This ensures that the services provided by the community worker is scientific and of high quality. 2. Community ownership and participation: CBACM should be owned and operated by the communities they serve. This ensures that the services provided are relevant to the needs of the community. 3. Affordability: Access to quality inputs and CBACM should be affordable to livestock owners. This can be achieved through subsidies or other nominal charges. 4. Self-Sustainability: technical backstopping and handholding of CBACM for sustainability in the long term. <p>DESIGN AND IMPLEMENTATION OF THE MODEL: The inception of the CBAC model was prompted by the realization of insufficient awareness and limited access to scientific veterinary practices and animal health services, particularly in the remote tribal areas of Bihar. Farmers in these areas faced significant challenges in providing adequate care for their livestock.</p> <p>1.Capacity Building of Locals:</p> <ul style="list-style-type: none"> ➤ In each implemented village, three motivated and interested youth were selected and trained under Agriculture Skill Council of India (ASCI) sponsored training program of 200 hrs for developing skills to impart paravet services including vaccination, deworming, artificial insemination, diagnosis of common diseases and providing advisories regarding pre and post-natal care of ruminants. ➤ Each CAHW have a kit with basic equipment (for example, syringe, needles, scissors) and 8–10 medicaments. The relevant instruction manuals have to be translated into the local language and, if necessary, illustrated. This includes technical skills in artificial insemination, first aid for injured animals, deworming, vaccination, and addressing common health problems such as diarrhoea, fever, and anorexia.
---	---

- As they live close to the animals and some of them are animal owner, they know best the needs of their colleagues. The beneficiaries meet out their expenses by providing animal health care service at farmer's doorsteps with realistic prices that can be afford by the farmer.

2. Creating Access to Quality Inputs:

- The model ensured the availability of necessary medicines, equipment, and veterinary supplies at the village level.
- Infrastructure of village Panchayat in these villages was utilized to establish Community Animal Health Centres wherein the basic veterinary facilities like travis were established and products including veterinary medicines, feed supplements, etc. were stored.
- These resources were accessible to the local community, with their proper utilization monitored through stock usage and distribution records.
- Initially, free vaccination drives, animal health camps and awareness programmes were organized to make livestock owners realize the importance of animal health care and to create congenial environment for sustainable functioning and utilization of the CAHC.
- Later on, with mutual agreement, the livestock owners and para-vet service provider of the village agreed up on to pay service charges to the trained para-vet ranging between rupees 10 to 100 on the basis of type of service provided.

3. Continuous Monitoring and Backstopping:

- Oversight and support for veterinary services and supplies were provided by the Animal Husbandry Subject Matter Specialist of Krishi Vigyan Kendras (KVKs).
- Regular monitoring of CBACM activities was conducted to ensure the proper functioning and utilization of resources.
- Community-operated animal health centres were established within existing government buildings and premises, serving as hubs for animal health services and the dissemination of awareness about scientific animal health and nutrition management practices.



c. Yield/productivity gain

Data related to impact assessment indicators namely, accessibility, affordability, quality of services, animal health and productivity were collected before and after implementation of CAHC intervention from randomly selected 120 livestock owners in the project area.

Implementation of CAHC, it was found that among poultry birds and goats, the mortality has reduced by 19% and 50%, respectively.

Further, it was observed that the inter-calving period (ICP) has also decreased by six months in dairy animals and the average milk productivity has increased by 322 grams (27.97%).

The success and popularity of the Community Animal Health Centre Model are particularly noteworthy in tribal villages, signifying a transformative approach to addressing the unique challenges faced by these communities in the realm of livestock management.

- A remarkable 79.71 percent reduction in the average cost paid per visit to veterinary service providers.
- A 44.92 percent decrease in average transportation charges incurred by livestock owners seeking animal health services.
- A 4.7 percent increase in the average number of free animal health services received in the last year.
- Local community members are empowered to diagnose

<p>d. Saving of water, labour, time and energy</p>	<p>and treat minor health concerns in animals without the need for extensive travel or expensive veterinary visits.</p> <ul style="list-style-type: none"> • Careful purchase of medicaments, adequate medicament storage rooms, transportation and communication facilities for staff are important for a successful animal health care system. <p>The average distance covered by livestock owners to seek animal health services before establishment of community animal health centre was 22.83 km.</p> <p>After establishment of community animal health center, this distance is reduced to 6.40 km (71.97%). Further it was observed that ease of access to animal health services has increased by 43.96%. Ease of access in this study refers to perceived easiness of making a successful visit to animal health service provider.</p>
<p>e. Conservation of resources</p>	<ul style="list-style-type: none"> • Reduced the risk of zoonotic diseases
<p>f. Capacity</p>	<ul style="list-style-type: none"> • Strengthening local economies by increasing the value of livestock
<p>g. Efficiency</p>	<ul style="list-style-type: none"> • Enhanced effectiveness and timeliness of services, with a 1.2-point increase on a 1 to 10 scale and a 52.8 percent improvement, respectively.
<p>h. Cost effectiveness including B:C ratio</p>	<ul style="list-style-type: none"> • The average cost for each visit of the veterinary service provider has also drastically reduced from Rs. 320 to Rs. 64.92. • Since the community animal health centres were established in the villages itself, farmers now rarely visit • The blocker district headquarters for seeking animal health services. As a result of this, now cost associated with transportation has reduced from Rs. 44.17 to Rs. 24.33.
<p>i. Uniqueness of the technology in comparison to existing ones</p>	<ul style="list-style-type: none"> • Over 80 percent of goat and cattle owners are now actively vaccinating their livestock. More than 60 percent of newborn and early-age animals undergo deworming. ➤ This model not only brings essential animal husbandry services to the doorsteps of farmers but also plays a pivotal role in skill development among rural youth. ➤ The major services provided under CAHC intervention were deworming, vaccination and treatment of minor diseases.

j. Passport data of the product/technology	<ul style="list-style-type: none"> ➤ •Created employment opportunities for local service providers in the para-vet sector. ➤ Attached as Annexure 																					
6. Details of relevant data generated during the development/validation	<p>Table: Impact of CBACM on the livestock health services affordability & accessibility among tribal communities</p> <table border="1" data-bbox="624 439 1466 844"> <thead> <tr> <th>Parameter</th> <th>Impact indicators</th> <th>Before CAHC</th> <th>After CAHC</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Affordability</td> <td>Average cost paid per visit of veterinary service provider (in Rs.)</td> <td>320</td> <td>64.92</td> </tr> <tr> <td>Average transportation charges for seeking animal health services (in Rs.)</td> <td>44.17</td> <td>24.33</td> </tr> <tr> <td>Average number of free animal health services received in last one year</td> <td>0.56</td> <td>2.63</td> </tr> <tr> <td rowspan="2">Quality of services</td> <td>Effectiveness of services (on 1 to 10 scale)</td> <td>7.01</td> <td>6.92</td> </tr> <tr> <td>Timeliness of services</td> <td>4.83</td> <td>7.38</td> </tr> </tbody> </table>	Parameter	Impact indicators	Before CAHC	After CAHC	Affordability	Average cost paid per visit of veterinary service provider (in Rs.)	320	64.92	Average transportation charges for seeking animal health services (in Rs.)	44.17	24.33	Average number of free animal health services received in last one year	0.56	2.63	Quality of services	Effectiveness of services (on 1 to 10 scale)	7.01	6.92	Timeliness of services	4.83	7.38
Parameter	Impact indicators	Before CAHC	After CAHC																			
Affordability	Average cost paid per visit of veterinary service provider (in Rs.)	320	64.92																			
	Average transportation charges for seeking animal health services (in Rs.)	44.17	24.33																			
	Average number of free animal health services received in last one year	0.56	2.63																			
Quality of services	Effectiveness of services (on 1 to 10 scale)	7.01	6.92																			
	Timeliness of services	4.83	7.38																			
7.. Proposed stakeholders	<p>Youths, Paravets, Farmers, Private agencies, NGO etc</p> <p>The model stands as a bridge, addressing critical gaps in delivering veterinary services to farmers' doorsteps, promoting sustainable animal health practices, and improving livelihoods in remote and underserved regions.</p>																					
8. Commercial potential, if any	<p>The high financial burden of animal health service provision coupled with structural adjustment programs led many countries to hand over animal health services to in public-private mode with private agencies.</p> <p>CAHWs are not meant to replace veterinarians and veterinary paraprofessionals (VPPs): they rather complement them to overcome the manpower shortage and employment generation among rural youth.</p> <p>CAHWs fill a gap in the animal health service provision network, in areas where demand for services and ability to pay from livestock keepers may not be sufficient to allow veterinarians and VPPs to operate financially viable businesses.</p>																					
9.. Publications/photos/video clipping, if any	Attached																					
10..Any other information not covered above	The success of the CBACM model has gained recognition through prestigious awards, such as the National Rural Film Fare Award organized by NIRD, Hyderabad, for the film " UMMEED. "																					