

#### K-11053(5313)/15/2019-LH

#### Government of India

Ministry of Fisheries, Animal Husbandry and Dairying Department of Animal Husbandry and Dairying

> Krishi Bhawan, New Delhi Dated the 10th October, 2019

To,

The Principal Secretary/Secretary Animal Husbandry Department All States / UTs

Sub: Forwarding of Minutes of National Steering Committee for National Animal Diseases Control Programme for FMD and Brucellosis (NADCP) held on 04 October, 2019 at Krishi Bhawan, New Delhi

Sır/Madam,

The undersigned is directed to forward herewith the Minutes of National Steering Committee for National Animal Diseases Control Programme for FMD and Brucellosis held on 04 October, 2019 at Krishi Bhawan, New Delhi under the Chairmanship of Secretary (AHD) for favour of your kind information and necessary action.

This issues with the approval of competent authority

Joint Comr soner (LH) Email: aclbdadf@gmail.com

Enclosed: a/a

#### Copy to

- 1 Commissioner/ Director, Animal Husbandry Department, All States/UTs
- 2. CEO, Livestock Development Boards
- 3 PPS to Secretary (AHD)
  4. PPS to AS & FA / AHC / DDG (AS)

- 5. PPS to JS(LH)
  6. PS to Hon FAHD Minister
  7. PS to Hon MOS (AHD)
  8. Director, CSSNIAH, Baghpat

MINUTES OF THE MEETING OF THE NATIONAL STEERING COMMITTEE FOR NATIONAL ANIMAL DISEASE CONTROL PROGRAMME (NADCP) HELD UNDER CHAIRMANSHIP OF SECRETARY (AHD), DEPARTMENT OF ANIMAL HUSBANDRY & DAIRYING, MINISTRY OF FISHERIES, ANIMAL HUSBANDRY & DAIRYING ON 4 <sup>th</sup> October, 2019 AT KRISHI BHAWAN, NEW DELHI

The first meeting of National Steering Committee for National Animal Disease Control Programme (NADCP) was held on 4 th October, 2019 under the Chairmanship of Secretary (AHD), Department of Animal Husbandry & Dairying Ministry of Fisheries, Animal Husbandry & Dairying.

- 2. The list of participants is placed at Annexure I. A video-conference was also held with States/ UTs who could not attend the meeting at Krishi Bhawan, New Delhi and the list of States are also mentioned in the Annexure.
- 3. At the outset, the Chairman welcomed the participants and gave the roadmap for implementation of National Animal Disease Control Programme for control of Foot & Mouth Disease (FMD) and Brucellosis (NADCP), which was launched by Hon'ble Prime Minister on 11<sup>th</sup> September, 2019. The Chairman emphasized on the enormity of the project that would require a tremendous, concerted and combined effort of the Centre and the States/ UTs to operationalize the programme at the ground-level so as to achieve its objectives.
- 4. Accordingly, the contours of the Operational Guidelines, the terms of reference/ role of a Programme Logistics Agency (PLA) and those of a Programme Management Agency (PMA) were discussed. The Chairman emphasized that PLA would be responsible for procurement, supply and distribution of the vaccines, ear tags and tag applicators thereby making them available to the State Governments (Animal Husbandry Department) at the district level maintaining the requisite cold-chain. PMA would act as the secretariat to the programme and would be responsible for implementation and monitoring the programme at the ground level as well as monitoring the responsibilities entrusted upon the PLA.
- 5. The following major points emanated out of the above Agenda-wise discussion:
- a) The contours of the operationalization of the NADCP were enumerated. It was mentioned that till now States/ UTs are implementing the FMD-CP scheme on 60:40 basis. However, from the next round, NADCP would be adopted by the States/ UTs with 100% funding from Centre.
- b) While vaccines, ear tags and tag applicators would be procured centrally, these would be distributed and supplied to the States up to the district level through a Programme Logistics Agency (PLA). Other items like disposable syringes, gloves, face masks, cold chain infrastructure, etc. would be procured and strategically made available by the State/UT Government concerned. The action plan from the States/ UT s was accordingly requested for. During the Video-Conference with the States/ UTs, Joint Secretary(LH) took stock of the position with respect to submission of Action Plan by the States/ UTs giving the requisite gap in various items, manpower etc. required to be procured at the State level and also giving the financial requirement for each of the item.

- c) It was highlighted in the meeting that States/ UTs have to meticulously identify the vaccinators and ensure that they are trained appropriately for ear tagging, vaccination (for both FMD and Brucellosis) and filling / uploading of data in the INAPH format.
- d) Each animal has to be tagged and identified at the time of vaccination only if they have not been tagged already in any other programme being implemented by various agencies. The vaccination record has to be maintained by the vaccinator in both the Animal Health Card and in the INAPH format. The vaccinator could fill the INAPH format in the mobile app and upload it directly or fill the data on the paper format and later upload it on the INAPH portal.
- e) It was suggested to explore possibility of using different coloured tags for different species of animals.
- f) Both the Center and the States/ UTs would set-up Call Centres and verify from the farmer randomly that whether vaccination is done as per records (INAPH/ record with Vaccinator). This would aid in monitoring of the programme at the ground level.
- g) A National and State level Public Awareness Campaign has to be launched and States/ UTs were requested to make films, radio jingles, posters etc. for maximum outreach and awareness amongst the beneficiary well before the vaccination. Drum-beaters and local publicity methods were also suggested and it was decided to go ahead with such practices as well as share slogans. However, the campaign should focus on the importance of vaccination against FMD and Brucellosis failing which the farmer might have to incur huge losses, as well as on the use of disposable syringes while vaccinating.
- h) Emphasis was also placed upon maintaining the cold-chain and its monitoring through Vaccine Vial Monitors (VVMs). ACS Haryana suggested a software application for monitoring 'real time' cold-chain maintenance. It was accordingly decided to examine the feasibility of such an application.
- i) Concern on late reports of seromonitoring was raised. AHC/ ICAR representative clarified that adequate kits are available for seromonitoring and testing will be undertaken timely through AICRPs.
- j) It was suggested that the biomedical waste disposal guidelines should be followed and it was clarified that it is already mentioned in the Operational Guidelines.
- k) It was suggested that the point on synchronization of vaccination schedule across the country shall be incorporated in the ToR for the PMA.
- I) Chandigarh and Ladakh to be incorporated in the ToR for PMA.
- 6. Further, based on the above discussions the following decisions were taken by the National Steering Committee (NSC):
- a) The Operational Guidelines for National Animal Disease Control Programme for FMD and Brucellosis were approved as enclosed at Annexure II

- b) The terms and references including mechanism for engaging a Programme Logistics Agency (PLA) was approved as enclosed at Annexure III. It was also decided to engage NAFED as PLA in view of the proposal received from them in this regard and its nationwide presence and experience in handling such operations. NAFED had proposed to charge 1% of tender value as their service charge for handling the logistic operations. NSC recommended that this charge for services to NAFED should not be more than 0.5% of tender value.
- c) The proposal for engaging a Programme Management Agency (PMA) to handle such an enormous project was approved. The scope of work of PMA, team structure along with qualifications for team members, criteria and methodology for selection including proposed draft RFP for appointment of PMA were approved as enclosed at Annexure IV.

7.	The meeting ended with a vote of thanks to Chair.

## Record of Meeting Attendance of DAHD, M/o FAHD, GOI

**Name of the Meeting:** Meeting of National Steering Committee of Central Sector Scheme National Animal Disease Control Programme

**Date:** 4 <sup>th</sup> October, 2018 Time: 2:00 P.M.

Venue: Committee Room No. 243, Krishi Bhawan, New Delhi

SI. No. Name		Name Designation and E-mail		Mob.No
1.	Sh. Atul Chaturvedi	Secretary, DAHD		_
2.	Sii. Atui Chatui veui	GOI	-	_
		AS & FA, GOI -	_	-
4.	Dr. P. Mallik	Animal Husbandry	_	_
	STIT THOUSE	Commissioner		
5.	Sh. Upamanyu Basu	Joint Secretory (LH), DAHD, GOI	-	-
6.	Mahup Vyas	Secretory, AH, GNCTD	cdevlp@nic.in	23930783, 23941773
7.	Tejdeep Singh Saini	Director, AH, Chandigarh	-	8283821251
8.	Dr. Kanwarjit Singh	Joint Director, AH, Chandigarh	dr.kanwarbhangoo@yah oo.com	9815745350
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12.	Dr. Sanjeev Khosla	Joint Director, AH Punjab	irector, AH dahpunjab@gmail.com	
13.	Dr. Sunil K Gulati (IAS)	ACS, AHD, Haryana	sunilaol@gmail.com	9650334888
14.	Dr. Nitant Pauniker	AHD, GNCTD, Delhi	pnitant@gmail.com	9811227768
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17.	Dr. Arvind Kumar Singh	Additional Director, Godhan, AH, UP	arvinayak1964@gmail.com	8415105802
18.	Dr. SK Srivastava	Director Disease Control, AH, UP	dirdef.ah-up@gov.in	9415375139
19.	BL Meena	Principal Secretary, AH, Government of UP	psdd2016@gmail.com	9560414440
20.	Dr. SS Juneja	Project Officer, AHD, Haryana	sominderjuneja@rediffmail. com	8968159377
21.	Dr. Satish Chandra	Deputy Director, AHD, UP	dahupplanning@gmail.com	8953470889
22.	Dr. P Blahwar Joint	Commissioner (LH)	jclhdadf@gmail.com	
23.	Dr. Rajiv Khosla	R.O. (NADCP)	rkhosla010@gmail.com	9810193241
24.	Dr. Sujit Nayak	AC(AH)	sujit.nayak@nic.in	9717529337
25.	Dr. Anirban Guha	LO(LH)	dranirban.dadf@gmail.com	9836341948

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# List of States participating through Video-Conference

- 1. Andaman & Nicobar Islands
- 2. Andhra Pradesh
- 3. Assam
- 4. Bihar
- 5. Chhattisgarh
- 6. Goa
- 7. Gujarat
- 8. Himachal Pradesh
- 9. Jharkhand
- 10. Kerala
- 11. Madhya Pradesh
- 12. Maharashtra
- 13. Meghalaya
- 14. Mizoram
- 15. Odisha
- 16. Puducherry
- 17. Rajasthan
- 18. Sikkim
- 19. Telangana
- 20. Uttarakhand
- 21. West Bengal

# OPERATIONAL GUIDELINES FOR NATIONAL ANIMAL DISEASE CONTROL PROGRAMME FOR FOOT AND MOUTH DISEASE (FMD) AND BRUCELLOSIS (NADCP)

#### 1. BACKGROUND

- 1.1 India's livestock wealth (512 million) includes 190 million cattle, 110 million buffaloes, 135 million goats, 65 million sheep and 10 million pigs. India is the largest producer of milk globally with production of 176.35 million MT (2017-18).
- 1.2 Yet, prevalence of animal diseases is a serious impediment to the growth of the Livestock Sector. Losses due to some of these diseases e.g. Foot & Mouth Disease (FMD), Brucellosis, etc. are humongous and often beyond estimation. It is because of FMD that there is not only reduction in the milk production and trade in livestock products but also there is infertility, reduction in the quality of hides and skins of the animals, including their draught power. Thus, FMD has a direct negative impact on trade of milk and other livestock products.
- 1.3 Brucellosis is a reproductive disease of livestock resulting in huge financial losses and has an adverse impact on human health, as it has zoonotic potential. Farm workers and livestock owners are always at risk of contracting as well as spreading this disease. Hence, control of Brucellosis will have a double impact both in human health and livestock health, besides rich economic gains to the animal owners / farmers.
- 1.4 It is therefore imperative to control Foot and Mouth Disease (FMD) by vaccination of all cattle, buffaloes, goats, sheep and pigs and Brucellosis by vaccination of all female bovine calves (4 8 months old) in the country. This will not only make animals healthy but will also result in better productivity and acceptability of our animal products world over. Finally, efforts in this direction would further contribute towards doubling farmers' income.

#### 2. RATIONALE

#### 2.1 Foot and Mouth Disease

- 2.1.1 Foot and Mouth Disease (FMD) is a highly contagious viral vesicular disease of cloven-hoofed animals such as cattle, buffaloes, sheep, goats and pigs etc. Clinical & visible signs include high fever (104-106 degree Celsius), loss of appetite and dullness, excessive salivation, vesicles in the mouth especially on the gums and tongue that result in ulcers, ulcers and wounds in the hoof in the inter-digital space, blisters on teats, etc. FMD leads to reduction in milk yield, decreased growth rate, infertility, reduced working capacity in bullocks, trade embargo in the international market.
- 2.1.2 It is amongst the most serious diseases of animals in terms of economic impact and is globally recognized as a priority disease for control and eradication. The economic losses suffered by farmers due to this disease are enormous and continue during the life cycle of the animal. FMD also leads to lack of access to export markets, despite India being the world's largest milk producer( Estimated national loss due to FMD Rs.20,000 crore per annum source ICAR ).

- 2.1.3 FMD spreads through close contact with infected animal/s, contaminated feed and water, through animal movement and through aerosol and contaminated objects. There is no immediate treatment once the animal is infected. Infected animal has to be isolated and given symptomatic treatment and the animal shed cleaned with suitable disinfectant.
- 2.1.4 Control of FMD can be achieved by mass vaccination of susceptible livestock repeatedly at regular intervals till the incidence of the disease comes down. This will pave way to gradual eradication of the disease from the country.

#### 2.2 Brucellosis

- 2.2.1 Brucellosis is a reproductive disease of cattle and buffaloes caused by bacterium Brucella abortus. The disease is characterized by fever, induces abortion at the last stage of pregnancy, infertility, delayed heat, interrupted lactation resulting in loss of calves, loss in production of meat and milk.
- 2.2.2 Brucellosis has an adverse impact on human health as it is zoonotic (transmissible to humans). It is also a serious occupational hazard. Affected humans may exhibit undulating fever, night sweats, body pains and aches, poor appetite, weight loss and weakness.
- 2.2.3 Bovine brucellosis is endemic in India and appears to be on the increase in recent times, perhaps due to increased trade and rapid movement of livestock. The nature of livestock rearing, especially in rural India, is conducive to spread of infection from livestock to humans due to close contact with animals.
- 2.2.4 In the absence of any treatment for Brucellosis in bovine animals, the disease can be prevented by vaccination. Control of Brucellosis can be achieved by a once-in-a-lifetime vaccination of female bovine calves (4-8 months old).

#### 3. OBJECTIVES OF THE PROGRAMME

The overall aim of the National Animal Disease Control Programme for FMD and Brucellosis (NADCP)is to control FMD by 2025 with vaccination and its eventual eradication by 2030. This will result in increased domestic production and ultimately in increased exports of milk and livestock products. Intensive Brucellosis Control programme in animals is envisaged for controlling Brucellosis which will result in effective management of the disease, in both animals and in humans.

#### 4. PROGRAMME IMPLEMENTATION

4.1 National Animal Disease Control Programme for FMD and Brucellosis (NADCP) is a Central Sector Scheme where 100% of funds shall be provided by the Central Government to the States / UTs.

Each State shall submit proposal to the Department of Animal Husbandry and Dairying (DAHD) as per the standard template enclosed at ANNEXURE 1 for FMD and ANNEXURE 2 for Brucellosis. While submitting proposal to the DAHD, the State should ensure that the proposal is complete in all respects and should also attach along with the proposal, the Financial and Physical

Progress Report and Fund Utilization Certificate as per format GFR-12A [Under Rule 238(1)] of GFR 2017 duly approved and countersigned by Secretary, AH Department.

The proposal once received by the DAHD shall be appraised and thereafter, it shall be placed before the National Steering Committee for approval and consideration for release of funds.

4.2 The roles and responsibilities of the agencies for implementation and monitoring the programme at the Centre and at the States / UTs are as detailed in the underlying paragraphs.

#### 4.2.1 National Level

At the national level, overall implementation and monitoring of NADCP would be done by the following agencies as under -

4.2.1.1 National Steering Committee (NSC): The National Steering Committee (NSC) would be headed by Secretary, Department of Animal Husbandry and Dairying (DAHD) and shall comprise of the following members -

Secretary, Department of Animal Husbandry and Dairying : Chairperson

(DAHD)

Additional Secretary & Financial Adviser, DAHD : Member
Animal Husbandry Commissioner, DAHD : Member
Deputy Director General (Animal Science), ICAR : Member
Joint Secretary (LH), DAHD : Member
Principal Secretary/ Secretary, Department of Animal : Member

Husbandry from the participating States/UTs

Director, CSSNIAH, Baghpat : Member

Joint Commissioner (LH) : Member Secretary

The roles and responsibilities of NSC shall be the following –

- a) Oversee activities of the NADCP, give overall direction and guidance, monitor and review its progress and performance
- b) Amend operational guidelines, if and when necessary, other than those affecting the financing pattern
- c) Approve Annual Action Plans and sanction release of funds to the central agency(ies)/ State Implementing Agencies (SIA)/ICAR Institutes
- d) Modify physical and financial targets based on review, approve inclusion and changes in eligibility criteria for implementing agencies and other guidelines including project area, composition of NSC, component structure and re-appropriation proposals
- e) Make changes and delegate powers necessary for smooth implementation of the programme
- f) Meet twice a year or as frequently as may be required
- g) The Chairman of NSC may approve projects in anticipation of approval of NSC, in case the next meeting of NSC is delayed

- 4.2.1.2 Programme Management Agency (PMA): The PMA shall act as the secretariat at the centre for the implementation and monitoring of NADCP and shall be headed by the Joint Secretary (LH), DAHD. The responsibilities of the PMA shall include collection, collation and analysis of the Annual Action Plans for NADCP for FMD and Brucellosis from the States /UTs for consideration of sanction of funds by the NSC to the central and state agencies. PMA shall appraise the plan of operation for vaccination in the States for FMD and Brucellosis that includes manpower requirement and deployment, their training, cold-chain infrastructure management at different levels in the States, districts and blocks, availability and distribution of vaccines, ear tags and tag applicators and suggest measures for alleviation of hurdles, if any, in the programme implementation in the States /UTs. Besides, the PMA shall be responsible for the overall monitoring of the programme including planning of public awareness programmes and trainings and management of the database at the central level (INAPH), those generated online (dashboard, etc.) and those through the Call Centre set up at the Centre.
- 4.2.1.3 Programme Logistics Agency (PLA): The agency shall be responsible for procurement of vaccines, ear tags and tag applicators centrally and shall undertake the following activities in this regard -
- a) PLA shall coordinate with central Programme Management Agency (PMA) to assess the requirement of vaccine dosages, tags and applicators, schedule of vaccination and supply of vaccines.
- b) PLA shall prepare tender document in consultation with DAHD, call for tenders, scrutinize the bid documents for vaccine suppliers, tags and applicators and finalize suppliers through competitive bidding.
- c) Based on the merit (technical and financial) of the bidder, the suppliers will be identified by PLA. The items will be as per specifications, terms & conditions in the bid.
- d) For vaccines, there shall be prior testing for quality through ICAR/CCSNIAH to check for eligibility as per specifications. PLA shall co-ordinate with the Institutes and the vaccine manufacturers for this purpose
- e) PLA shall plan the delivery schedules including identification of various suppliers for specific destination well in advance to ensure that manufacturer supplies the vaccine and ear tags etc. at the district level maintaining cold-chain for the vaccines, based on the requirements as per the State Action Plans.
- f) PLA shall carry out pre-dispatch physical verification of vaccines and ear tags with applicators at the manufacturers' end. This will include expiry of the vaccines through the VVMs, temperature loggers, etc. PLA will also obtain the quality check reports done by the manufacturer before dispatch of the vaccines. PLA shall further ensure random quality testing of vaccine batches prior to dispatch of vaccine in coordination with IVRI/ CCSNIAH.
- g) PLA shall ensure that the States/ UTs receiving the materials checks the contents of the packages and record the number of vaccines received at the destination as well as expiry of the

vaccines through the VVMs, temperature loggers, etc. Batch-wise traceability of vaccines used under NADCP is to be maintained by PLA in coordination with State Governments / UTs.

- h) Random check at field level shall also be done for verifying receipt of vaccines, ear tags and applicators as well as expiry of the vaccines through the VVMs, temperature loggers, etc.
- i) PLA shall release payment to vaccine suppliers and ear-tags including applicator suppliers on receipt of acceptance certificates from the respective State Animal Husbandry Departments regarding quantity and quality of each components including results of seromonitoring concerning the vaccines supplied.
- j) PLA shall obtain necessary approval from DAHD from time to time for meeting various expenditure of the activities such as, placing of orders on the selected suppliers, release of money to the suppliers, etc.
- k) PLA shall ensure that the GFR of Ministry of Finance shall be followed and strictly adhered to while dealing with matters of financial nature. The PLA shall adhere to the checklist for verification and payment of bills in connection with purchase of vaccines, ear tags and tag applicators.
- I) A separate account shall be opened in a Bank by PLA for NADCP and record of the funds shall be maintained meticulously.
- m) PLA shall intimate DAHD on all the activities undertaken on a regular basis.
- 4.2.1.4 Central Call Centre: The Call Centre set up at DAHD shall be responsible for monitoring implementation of the programme on the ground by calling up beneficiaries (livestock owners) over the telephone and ascertaining vaccination details vis-à-vis their livestock. The Call Centre shall liaise with NDDB (w r t the INAPH portal) and the SMUs with regard to data of the livestock owners (UID and mobile telephone numbers collected during vaccination /ear tagging and registration on INAPH)
- 4.2.1.5 Information Network for Animal Productivity and Health (INAPH) portal of National Dairy Development Board (NDDB): This portal shall serve as the central database for animals registered uniquely on INAPH. 100% central funding would be provided to NDDB for registering the animals (vaccinated) and maintaining the INAPH database. Liaison of INAPH with the Call centre set up centrally will enable verification of implementation of the programme at the ground level under NADCP.

#### 4.2.2 State / UT Level

The State / UT government shall provide the requisite administrative support and the necessary infrastructure for cold-chain maintenance for vaccines, power back up, etc. and manpower to carry out vaccination and other related activities in a systematic manner as per the planned calendar in order to effectively control these diseases. For smooth implementation of the programme at the district, block and village level, the State Animal Husbandry Department shall constitute the following units with their enlisted roles and responsibilities as under -

4.2.2.1 State Monitoring Unit (SMU): State / UT Department of Animal Husbandry shall monitor the Programme through State Monitoring Units to be headed by the Principal Secretary / ACS / Secretary of the Department of Animal Husbandry of the State / UT concerned, as Chairman of the SMU. Commissioner / Director, Animal Husbandry Department of respective State/UT shall be an exofficio member of the SMU. The SMU may co-opt any other member(s) as deemed necessary from other State / UT government agencies / departments and Panchayati Raj Institutions for effective implementation of the programme.

The State Monitoring Unit shall oversee the overall activities of the NADCP at the respective State/ UT and shall have the following functions:

- a) Monitor and review progress and performance of the NADCP
- b) Chairman of SMU is empowered to approve the Annual Action Plans submitted by the State Implementing Agencies / Livestock Development Boards and forward the same to the Central Government for consideration of sanction / release of funds to the SIAs / LDBs.
- c) SMU shall oversee and finalize the process related with procurement / tendering of vaccines and other logistics required for vaccination and ensure that all vaccine doses and logistics are available before the start of the vaccination round.
- d) SMU shall ensure in advance that the required vaccine doses are available at district / block level well before start of vaccination round as per scheduled month of vaccination. Vaccination should only be started when all logistics are put in place.
- e) SMU shall ensure receipt of vaccines, tags and applicators in good condition supplied by the suppliers authorized by central Programme Logistics agency (PLA). SMUs shall, after due verification of quality and quantity of vaccines, ear tags and applicators, ensure sending certificate regarding the same countersigned by Principal Secretary / Secretary in charge of Animal Husbandry Department of State / UT. The quality verification of vaccine should also include results of sero-monitoring.
- f) SMU shall ensure maintaining continuous cold-chain throughout the vaccination period for effective implementation of the programme. SMU shall ensure that adequate cold chain facilities are strengthened for storage of vaccines. Cold chain maintenance shall also be ensured while supplying vaccine at district or block level.
- g) SMU shall draw district / block- wise, village wise vaccination programme and should indicate date of start of vaccination, duration and date of completion for further implementation by District and Block Monitoring unit. The interval of six-monthly vaccinations needs to be maintained for FMD Control Programme while for Brucellosis Control Programme a schedule shall be drawn so as to ensure 100% coverage of the female bovine calves of 4-8 months of age.
- h) SMU shall ensure availability of trained manpower for carrying out vaccination and also ensure extension activities, training to field staff, publicity and awareness.

- i) In places where sufficient staff is not available, SMU shall ensure availability of manpower to be deployed from neighboring districts / co-operative societies / private organizations / veterinary colleges / Universities, etc.
- j) SMU shall ensure diagnostic facilities to all the laboratories engaged in the serosurveillance and seromonitoring work.
- k) SMU shall establish liaison with concerned ICAR laboratories / ICAR-DFMD / ICAR-NIVEDI, etc. for sero-monitoring. SMU shall also ensure that a result of seromonitoring is conveyed to PLA in time.
- I) SMU shall evaluate impact of programme and constant review of the progress of project.
- m) SMU shall submit the weekly report of progress of vaccination to GOI as per prescribed format.
- n) SMU shall also submit the completion report of vaccination round to GOI as per prescribed format
- o) SMU shall ensure that vaccination programme should be carried out in Mission mode in shortest possible time period (within 21-30 days for FMD-CP) for its effectiveness so as to build herd immunity and ensure vaccination of all leftover animals and new introduction.
- p) For FMD-CP, it must be ensured that all susceptible animals, including pregnant ones, must be included in the vaccination programme. Fear of abortion due to vaccination, if any, must be alleviated through extensive Information and Education Campaign at the farmers' level.
- q) SMU shall also ensure complete vaccination of all stray animals to be covered under the programme.
- r) SMU shall ensure availability of stock of emergency medicines for immediate use as anti-shock treatment in a suspected case of anaphylactic reaction, if any.
- s) For proper identification of vaccinated animals, SMU shall ensure that ear-tags, tagging machines, etc. are available before start of vaccination. All vaccinated animals shall be ear-tagged and registered in INAPH animal health module database.
- t) SMU shall ensure training of technicians involved in the process of ear-tagging, entry of details required and uploading in the data in the INAPH server. Simultaneous issuing of animal health cards for recording details of vaccinated animals to animal owners may also be ensured. Vaccination card need to be issued for individual animal, where ever the same has not been issued earlier, and handed over to the animal owner.
- u) SMU shall ensure 'Master' creation as well as vaccination camp creation at district level in the animal health module of INAPH.

- v) SMU shall ensure that wide awareness and publicity throughout the Sate/ UT is given towards this programme of the Department.
- w) SMU may also coordinate with neighboring States under FMD-CP for carrying out vaccination round simultaneously.
- x) SMU shall arrange to regulate the entry of animals from other States only against a vaccination proof of 21 days ago. Wider publicity should be given to encourage the farmers to get the newly introduced animals vaccinated, preferably before their entry to the State. If not, at least immediately on arrival.
- y) SMU shall ensure strict compliance of the provisions under the Prevention and Control of Infectious and Contagious Diseases of Animals Act, 2009 and rules thereon either notified by Central Government or framed by the State Governments as empowered by the various provisions of the Act for effective implementation of the disease control programme
- z) SMU shall ensure setting up of State-level Call Centre and other mechanisms to verify and monitor the implementation of the programme.
- 4.2.2.2 District Monitoring Unit (DMU): The DMU is to be headed by the District Magistrate, as its Chairman. The DMU may co-opt any other member(s) as deemed necessary from other State / UT government agencies / departments and Panchayati Raj Institutions for effective implementation of the programme. Joint Director / Deputy Director / District Veterinary Officer, Animal Husbandry Department shall be the Convener of the District Monitoring Unit (DMU).

The responsibilities of the DMU are as follows:

- a) The DMU shall be the main executive unit in the entire implementation of the programme. DMU shall be responsible in ensuring that required vaccines and all logistics required for vaccination including man-power for carrying out vaccination, cold chain cabinets and vaccine carriers are in place well before the start of the vaccination programme.
- b) DMU shall ensure execution of vaccination in the entire district as per schedule and prescribed procedures, collection of sera samples for sero-monitoring, animal identification and documentation.
- c) The DMU shall be responsible for surveillance within the district during the entire project period and shall investigate any suspected outbreaks of FMD/ Brucellosis and arrange for sending specimen for laboratory confirmation.
- d) DMU shall be responsible for training of staff engaged in vaccination programme well before the start of the programme and should prepare calendar of operation with the help of District Animal Husbandry officer and Block Officers.

- e) DMU should ensure mass education / awareness campaign on FMD/ Brucellosis amongst the livestock farmers giving emphasis on economic impact of the disease and benefits likely to accrue due to preventive vaccination of their animals and timely reporting of the disease in case of its suspicion/occurrence. All forms of print and electronic media to be considered while disseminating the information
- f) DMU shall ensure working of the cold room / cabinets required for storage and cold chain maintenance of the vaccine at district head quarter
- g) In case of failure of electricity, generators shall be made available to maintain the cold chain.
- h) At the time of supply of vaccine by suppliers at district level, maintenance of cold chain for vaccine shall be ensured and temperature monitor card and VVMs should also be inspected.
- i) DMU shall supervise vaccination programme and provide all necessary required infrastructure facilities like aprons, disposable syringes, needles, biological waste. deposit bags, transportation arrangement, vaccine containers etc. to the Block Officers.
- j) DMU shall maintain the buffer stock of vaccines as per the requirement to ensure prompt delivery.
- k) DMU shall compile epidemiological information and data of vaccination programme and various reports and submit to SMU as per the schedule.
- I) DMU, with the help of District Polyclinic shall co-ordinate with the respective Disease Investigation Laboratories to collect pre- and post-vaccination sera samples for seromonitoring by ICAR/ICAR-DFMD laboratories, etc.
- m) For proper identification of vaccinated animals, DMU shall have ear-tags, tagging machines, etc. readily available before start of vaccination. DMU shall ensure that vaccinated animals are necessarily ear-tagged and registered in the INAPH animal health module database.
- n) DMU shall ensure training of technicians involved in the process of ear-tagging, entry of details required and uploading in the data in the INAPH server. Simultaneous issuing of animal health cards for recording details of vaccinated animals to animal owners may also be ensured. Vaccination card need to be issued for individual animal, where ever the same has not been issued earlier, and handed over to the animal owner.
- o) DMU shall be responsible for 'Master' creation as well as vaccination camp creation at district level in the animal health module of INAPH.
- p) DMU shall liaise with other agencies, Co-operative department, Panchayati Raj Institutions, women Self-Help groups and Youth organizations for effective implementation of the programme.
- q) DMU shall supervise proper disposal of bio-medical waste generated during vaccination programme.

- 4.2.2.3 Block Monitoring Unit / Block Veterinary Officers: Following are the responsibilities of the Block Veterinary Officers -
- a) Block Veterinary Officer (BVO) at block level shall ensure the supply of vaccine to field officers as per the calendar of vaccination. For example, village wise vaccination plan for FMD-CP should be prepared in each block so as to start vaccination from border villages.
- b) BVO shall ensure availability of adequate vaccine stock as per eligible animal population and ensure maintenance of cold chain. In this regard BVO should also have knowledge of vaccine vial monitors (VVM) and how the same are to be interpreted. This information should also be given to the vaccinator by the BVO.
- c) BVO shall ensure all pre-requisite of the vaccination programme like trained manpower, vaccine carriers, syringes, needles, biological waste deposit bags, personnel protective equipment (apron, hand glove, plain protecting glass), ear- tags, ear-tagging machines, transport of vaccine, etc., before starting actual vaccination in the block.
- d) Field Veterinary Officer/vaccinator shall obtain the vaccine doses from District Veterinary Officer (DVO) or Block Veterinary Officer (BVO) in vaccine carriers with gel / icepacks. The gel packs should have been stored in cold cabinets at (-) 20°C for 48 hours.
- e) BVO shall ensure that separate disposable needle is used for vaccination of each animal.
- f) BVO shall ensure that technicians involved in ear-tagging are aware of the procedure and enter relevant details required as per the animal health module of INAPH.
- g) BVO shall ensure that animal health cards with recorded details of vaccinated animals are issued to animal owners. Each animal shall be issued a Vaccination card and thereafter BVO shall ensure that these cards have been handed over to the animal owner.
- h) BVO shall help in collecting pre-vaccinated and post-vaccinated sera samples for laboratory analysis.
- i) BVO shall provide publicity material at local level such as leaflets, pamphlets, posters etc., to village panchayat, cattle market authorities and sugar factory authorities, etc.
- j) BVO shall take the support of Block Development Officer, local leaders and key person(s) in the area, women self-help groups, youth organizations, etc., for effective implementation of the programme
- k) In case of suspicion of outbreak or confirmation of FMD outbreak, Block Veterinary Officer should implement all necessary control and containment measures immediately and also report the suspected / confirmed outbreak through the National Disease Reporting System (NADRS)

- I) The Officer in-charge of Veterinary Institutes with his team shall vaccinate all eligible animals as per programme norms.
- m) During the vaccination campaign, it should be ensured that vaccine bottles are continuously kept in vaccine carriers when not in immediate use so that cold- chain is maintained.
- n) Vaccinators shall ensure that vaccine bottles once opened (punctured) should be used on the same day itself to avoid deterioration of potency / quality of vaccine.
- o) Vaccinators shall take care to avoid spillage of vaccine during filling up the syringe.
- p) If the animal becomes ferocious or gets disturbed while carrying out vaccination thereby leading to spilling of the vaccine, it shall be ensured that such animals are once again vaccinated properly.
- q) Vaccinator shall hand over the vaccination card, duly signed by the Veterinary Officer, to every animal owner after vaccinating the particular animal.
- r) The Officer In-charge of Veterinary Institutes shall monitor the vaccination programme in the villages under its jurisdiction and shall ensure participation of village officers, panchayat, gram sevaks, key person(s) and local leaders of the village(s).
- s) He /she shall provide information about the control programme, its importance and impact to the villagers through discussion, leaflets, pamphlets, posters, visual aids during training and awareness programmes, etc., so as to encourage the farmers to vaccinate their animals.
- t) Appropriate disposal of used / waste materials or any other bio-medical waste generated also need to be ensured by the BVO.
- 5. Activities under NADCP for FMD and Brucellosis
- 5.1 Control of Foot & Mouth Disease:

Major activities of this programme include -

- o vaccinating the entire susceptible population of bovines, small ruminants (sheep and goats) and pigs at six-monthly intervals (mass vaccination against FMD)
- o primary vaccination of bovine calves (4-5 months of age)
- o deworming one month prior to vaccination
- publicity and mass awareness campaigns at national, state, block and village level including orientation of the state functionaries for implementation of the programme
- o identification of target animals by ear-tagging, registration and uploading the data in the animal health module of Information Network for Animal Productivity and Health (INAPH)
- o maintaining record of vaccination through Animal Health cards
- o serosurveillance/seromonitoring of animal population
- o procurement of cold cabinets (ice liners, refrigerators, etc.) and FMD vaccine

- o investigation and virus isolation and typing in case of outbreak
- o recording/regulation of animal movement through temporary quarantine/ check- posts
- o testing of pre-vaccination and post-vaccination samples
- o generation of data and regular monitoring including evaluation of impact of the programme
- o providing remuneration to vaccinator which should not be less than Rs.3/- per
- o vaccination dose and Rs.2/- per animal for ear-tagging including animal data entry

#### 5.1.1 Vaccine and Vaccination:

Control of FMD to be achieved by mass vaccination of all susceptible livestockrepeatedly at regular intervals. The mission of the project is carrying out 100%vaccination of cloven-hoofed domestic animals viz., cattle, buffalo, sheep, goat and pig.Primary vaccination of cattle and buffalo calves (4 to 5 months age) is also to be carried out. Vaccination shall be carried out biannually (six-monthly interval). The duration of each mass vaccination shall be a maximum of 30 days (extendable by 15 days only in unavoidable cases). It shall be preferable to complete vaccination in a single time-frame all over the country but the State/UT may provide their individual vaccination schedule at the beginning of each financial year till synchronized vaccination throughout the country is achieved. The details of work plan with technical indicators for NADCP – FMD and Vaccination are given in Table 1 and Table 2, respectively, as annexed.

5.1.1.2 100% central assistance shall be given for procurement of vaccine and other logistics to carry out vaccination including remuneration to private vaccinators, creation of cold- chain facility and serum sample collection. Vaccines shall be procured by the Centre or its agency and the requisite logistics including cold chain facility and serum sample collection vials by State/UT Implementing Agencies/ Livestock Development Boards preferably through GeM or by tendering following all the codal /legal provisions and Financial Rules and Regulation. The vaccine requirement and vaccination schedule district-wise as well as their timelines for this activity should be planned. The indicative format at Sl. No. 3 of the Model Annual State Action Plan for NADCP for FMD annexed (ANNEXURE 1), shall be referred.

5.1.1.3 The State/ UT Government shall provide infrastructure for cold chain maintenance and manpower to carry out vaccination against FMD in a systematic manner at six-monthly intervals, which is essential for effective control of FMD. The infrastructure for cold- chain management and the total manpower requirement for carrying out vaccination during the vaccination campaign district-wise along with timelines for these activities should be planned well in advance. The indicative format at Sl. No. 12 and 6 respectively of the Model Annual State Action Plan for NADCP for FMD annexed (ANNEXURE 1) shall be referred.

#### 5.1.2 Parasitic control:

Deworming before vaccination help to get better immune response. Deworming shall be done twice a year, preferably to commensurate with the vaccination programme, but 3-4 weeks prior to it. The procurement of anthelmintic shall be done by the State/UT Implementing Agencies/ Livestock Development Boards through GeM or by tendering following all the codal / legal provisions and Financial Rules and Regulation.

#### 5.1.3 Publicity and awareness:

- 5.1.3.1 Wide publicity about the programme shall be given in such a way so that the message of importance of vaccination, disease control and prevention reach the target beneficiaries. Emphasis shall be given on the economic impact of FMD on the rural economy. Both print and electronic media such as television, radio, community radio, newspapers- posters-leaflets-wall painting-banners etc., shall be used both for general awareness and for awareness of the notified vaccination schedule, especially, vaccination dates, movement control of animals, importance of disease etc. Sensitization of the stakeholders is important for the success of the programme. Private agencies/ State Cooperatives/ NGOs may also be utilized for implementing behavior change strategies in the communities.
- 5.1.3.2 100% Central assistance would be given to the State/UT Implementing Agencies/ Livestock Development Board for awareness campaign. Indicative activities with timelines as given in the indicative format at SI. No. 11 of the Model Annual State Action Plan for NADCP for FMD annexed herewith (ANNEXURE 1) shall be referred and shall be adhered to.

#### 5.1.4 Animal Identification and Animal Health card:

- 5.1.4.1 100% central assistance shall be provided to National Dairy Development Board (NDDB) and the State/UT Implementing Agencies/ Livestock Development Board for capturing the animal data through animal health module of INAPH and ear-tagging. Animal Health cards for individual animals are to be given to the farmers / animal owners to maintain a record at their level. A model format of the Animal Health cum Vaccination Certificate is annexed at ANNEXURE 3. The envisaged outcome of implementation of Animal Health Module of INAPH is to ensure traceability of all the animals that have been ear-tagged and registered including generation of area-wise data on the percentage of vaccination coverage. Animals which are already tagged under different schemes under INAPH module will not be tagged again. The data capturing in the INAPH module for FMDCP (refer ANNEXURE 4) may also be used for other related programmes / schemes of the Department.
- 5.1.4.2 The requirement of ear-tags and tagging schedule shall be worked out district wise at least four months before the start of vaccination campaign and procured by the Centre or its agency/ the State/UT Implementing Agencies/ Livestock Development Boards through GeM or by tendering following all the codal / legal provisions and Financial Rules and Regulation. The tagging schedule shall coincide with the vaccination schedule. An indicative format for working out the requirement of ear-tags along with tagging schedule mentioned in the indicative format at SI. 4 of the Model Annual State Action Plan for NADCP for FMD annexed, (ANNEXURE 1) shall be referred.
- 5.1.4.3 Training of Master Trainers for usage of the animal health module of INAPH including creation of district wise 'Masters' in INAPH at NDDB and thereafter the Training of Trainers at district level for the activities related with INAPH has to be ensured by the State / UT Department.
- 5.1.4.4 Requisite training for the vaccinators, personnel involved with ear tagging and registration as well as entry of vaccination data of individual animal in the animal health module of INAPH at the field shall be ensured by the State / UT Department concerned. Indicative training module as well as

timelines for this activity may be referred to at Sl. No. 7 of the Model Annual State Action Plan for NADCP for FMD, annexed (ANNEXURE 1).

- 5.1.5 Establishment/ Strengthening of Check posts: FMD is a trans-boundary animal disease and hence, veterinary border check-posts set up to control movement of live animals and animal products entering to the country or inter-state is one of the ways to control animal movement. 100% Central funding shall be provided to the State/UT Implementing Agencies/ Livestock Development Boards for establishment or strengthening of check posts @ Rs.10 lakh per check post. The manpower to operationalize these check posts shall be provided by the State/UT Government. It is preferable to establish a check post at strategic points of animal movement corridors and preferably near to Veterinary Hospital / Dispensary, etc.
- 5.1.6 Serosurveillance, Seromonitoring, Vaccine testing and Vaccine matching: The ICAR-DFMD, Mukteshwar, IC-FMD, Bhubaneswar and ICAR-IVRI, Bengaluru to carry out serosurveillance, seromonitoring and vaccine testing. DAHD may involve CCSNIAH, Baghpat for the same as well as other institutes as per need. Testing of FMD vaccine as per IP vet shall be carried out at ICAR-Indian Veterinary Research Institute (IVRI), Bengaluru or at any other Institute approved by DAHD. 100% Central assistance shall be given to these institutes for carrying out serosurveillance, seromonitoring, vaccine testing and vaccine matching. Grants shall be provided by DAHD directly to these institutes for their establishment and strengthening.
- 5.1.7 Grant-in-Aid to Research Institutes: Funds have been earmarked for ICAR Research Institutes for FMD and Brucellosis.

#### 5.2 Control of Brucellosis

- 5.2.1 The major activities of this component include mass screening of cattle and buffaloes to know exact incidence of the disease in an area / villages / block / district of state, once in lifetime vaccination of all female calves between 4-8 months using B. abortus S-19 strain vaccine (any alternative vaccine may replace the existing one in future), one time grant to strengthen one ELISA laboratory in a State/UT, consumables for ELISA Laboratories, remuneration to privately engaged vaccinators in absence of sufficient manpower, publicity and awareness campaigns at national, state and block level, including orientation of the state functionaries for implementation of the programme and online monitoring & data management at HQ. The details of work plan with technical indicators for NADCP for Brucellosis and vaccination are given in Table 3 as annexed.
- 5.2.2 Vaccine and vaccination: As NADCP is a Central Sector Scheme, 100% financial assistance shall be provided by the Central Government for undertaking all activities. State/ UT Governments shall submit their proposals for their annual financial requirement for covering 100% bovine (cattle & buffalo) female calves' population of 4 to 8 months of age. The vaccination is to be done only once-in-a-lifetime in 4-8 months' old female bovine calves. Procurement of vaccine shall be undertaken by the Centre or its agency / State Implementing Agency / Livestock Development Board following financial / codal procedures of the respective State/UT Government.

- 5.2.3 As Brucellosis in animals is highly zoonotic, therefore handling of live attenuated vaccines and vaccinating animals need extra care. Any accidental exposure to it may result infection to the personnel engaged in vaccination. The manpower physically engaged in vaccination of animals need personal protective equipment (PPE) gumboots, goggles, gloves and masks, etc. and also requires proper training for handling of vaccines and performing vaccination of the animals. Each State Implementing Agency/ Livestock Development Board shall ensure procurement of all protective equipment and submit proposals for financial requirements. The procurement shall be undertaken by the Centre or its agency /SIAs/LDBs following requisite financial codal procedures.
- 5.2.4 Remuneration to private vaccinators: Keeping in view of insufficient manpower with the State Animal Husbandry Departments and to achieve the goal of 100% control of brucellosis in bovines, the programme requires vaccination of every individual targeted bovine female calf. In this connection, private personnel may be engaged to compensate the vacancies of the state governments. The private vaccinators shall be trained for handling of vaccine, personal protection and vaccination of animals. For carrying out vaccination, the vaccinator shall be paid @ Rs.4.00 per dose.
- 5.2.5 Strengthening of ELISA Laboratory in each State/UT: Brucellosis is a complicated disease in terms of diagnosis. A precise diagnosis of active infection is important for the control of the disease in livestock. Clinical diagnosis is based usually on the history of reproductive failures in livestock, but it is a presumptive diagnosis that must be confirmed by laboratorial methods. Whole blood and serum samples are the easiest to use in terms of collection, handling and processing and pose lower risks especially serum samples. Therefore, it has been recommended to use appropriate samples for the diagnosis of brucellosis.
- 5.2.6 Laboratories in the states shall conduct serosurveillance for brucellosis under this programme. Since the programme covers vaccination of 100% bovine female calves' population, therefore sampling plan for serosurveillance must include each block/taluka. These laboratories shall be strengthened with ELISA Reader.
- 5.2.7 The State/UT ELISA laboratory engaged in serosurveillance requires consumables for conducting diagnostic tests for prevalence of brucellosis disease in animals. Each such laboratory shall be provided financial assistance over the period of implementation of the programme.
- 5.2.8 Conducting Village level screening of serum samples for Brucellosis: State Government shall conduct Village Level Screening of samples for Brucellosis disease @ 2% of total bovine population for which financial assistance to the State Implementing Agency/Livestock Development Board shall be given @ Rs.5.00 per sample. The sero-surveillance of brucellosis in cattle & buffalo shall be followed as per surveillance plan given by the ICAR NIVEDI, Bengaluru.
- 5.2.9 Conducting awareness programmes: In animals, Brucellosis usually spread through contact with infected birthing tissues and fluids (e.g., placenta, aborted fetuses, fetal fluids, vaginal discharges). The bacteria causing this disease can also be found in milk, blood, urine and semen of infected animals. Animals can get the bacteria by ingestion (oral), direct contact with mucous membranes (eyes, nose, mouth), or breaks in the skin. Brucellosis can also be transmitted by

contaminated objects (fomites) such as, equipment, clothing, shoes, hay, feed or water. Some animals are carriers; they will have the bacteria but show no signs of illness. These animals can shed the bacteria into the environment for long periods of time, infecting other animals in the herd. Brucella can survive for months in the environment under optimum conditions but can be destroyed by heat and some disinfectants.

In view of the above, it is understood that sensitization of Brucellosis is very much needed. Therefore, creating awareness with regards to management of uterine discharges/aborted fetus /retention of placenta and necessity of vaccination of female calves at the age of 4-8 months of age along with the zoonotic importance of the disease is the need of the hour. For this reason, this Brucellosis control programme has a provision for financial assistance to organize camps, for advertisements, campaigns, etc.

5.2.10 Animal Health Cards for individual animals are to be given to the farmers as at ANNEXURE 3 if not already provided earlier in FMD programme for maintaining a record at their level. Animals shall also be tagged if not already tagged in FMD programme or any other programme. The data capturing in INAPH module for Brucellosis (as per ANNEXURE 4) shall also be done after administering the vaccine.

The vaccinator would also be provided Rs.2/- per animal for ear-tagging and data entry if this tagging is done in Brucellosis vaccination programme.

5.2.11 Grants-in-Aid to Indian Council of Agriculture Research - National Institute of Veterinary Epidemiology and Disease Informatics (ICAR-NIVEDI) for conducting seromonitoring at National Level: ICAR-NIVEDI shall be provided an annual grant for conducting seromonitoring (pre-vaccination and post vaccination sera samples), confirmation of doubtful cases, training of laboratory personnel, state-wise sampling plan and also technical support to State/UT Governments for screening outbreak samples etc.

#### 6. EVALUATION

Evaluation of the programme at the end of two years (2021-22) and five years (2023-24) would be carried out by an independent third-party agency. The programme shall also be subject to audit as per extant Government of India procedures.

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Table 1: Details of work plan with technical indicators for NADCP – FMD

Sl.No.	Items of Work Plan	Technical indicator
1.	States to be covered	All States and Union Territories of the country
2.	Animals to be vaccinated	300 million cattle and buffaloes, 200 million sheep and goat, and 10 million pigs ( to be revised as per latest census data being undertaken ) in each round of vaccination. Primary vaccination for bovine calves (4-5 months of age)
3.	De-worming	Entire population of cattle, buffalo, sheep, goat and pig, twice a year, one month before vaccination
4.	Vaccination	Six-monthly (Bi-annual). Primary vaccination for Bovine calves (4-5 months of age)
5.	Vaccine to be used	Trivalent (O,A, Asia-1) BEI inactivated with minimum 3PD 50 per dose. The manufacturer to self-certify the vaccine to be NSP free
6.	Functional check-posts	There would be adequate number of functional check posts in strategic locations at inter-state boundaries

Table 2: Details of vaccination for FMD

Table 2. Details of Vaccination for Fivid						
Description of animal	Vaccination schedule					
Young Animals	Bovine calves 4-5 months old. Booster dose of vaccine shall be administered four weeks after					
	primary vaccination and regular vaccination					
	should be followed thereafter every 6 months					
Adult Animals	Six-monthly vaccination as recommended under					
	the programme					
<ul> <li>FMD vaccine shall be kept constantly at a</li> </ul>	temperature between 2°C and 8°C					
<ul> <li>The vaccine shall neither be frozen nor be exposed to temperature higher than 8°C</li> </ul>						
The dose of vaccine used shall be as per the manufacturer's instructions which is at						

- The dose of vaccine used shall be as per the manufacturer's instructions which is at present 2ml each for cattle, buffalo and pigs while 1 ml for sheep and goats
- o Route deep intramuscular ( Care must be taken not to rupture bigger blood vessels that may cause emboli in the blood stream )

Table 3: Details of work plan with technical indicators for NADCP - BCP

SI. No.	Items of Work Plan	Technical indicator		
1.	States to be covered	All States and Union Territories in the		
		Country		
2.	. Animals to be vaccinated 100% vaccination coverage of			
		female calves of 4-8 months of age		
3.	Vaccination Once in a life-time calf-hood vaccination			
4.	Vaccine Brucella S 19			
5.	<ul> <li>Brucella vaccine shall be kept constantly</li> </ul>	at a temperature between 2°C and 8°C		
	<ul> <li>Use only the diluent provided with the v</li> </ul>	vaccine for its reconstitution		
	<ul> <li>The dose of vaccine used shall be as per the manufacturer's instructions which is at</li> </ul>			
	present 2 ml each for female cattle and buffalo calves			
	Route -sub-cutaneous ( Care must be taken not	to vaccinate the rump region of the animal )		

# STATE ACTION PLAN ON NADCP FOR FMD & BRUCELLOSIS

#### National Animal Disease Control Programme (NADCP) for FMD & Brucellosis

- a. AIMS:
  - a) Control of FMD and Brucellosis by the year 2025.
  - b) Eradication of FMD and Brucellosis from India by the year 2030.
  - c) Vaccination of all susceptible animals @ 6 months interval.
  - d) Identification and tagging of all vaccinated animals with UID registration and upload data in INAPH Portal.
  - e) Pre and Post-vaccination serum collection and processing for screening.
- b. Notification of constitution of State Implementing Agency vide no. D.22011/25/2018-AH&V of 28th August, 2019.
  - a) Commr. & Secretary, AH&Veterinary Department
     b) Director, AH&Veterinary Department
     c) Joint Director(LH), AH&Veterinary Department
     d) Co-Chairman
     e) Chief Executive
     f) Officer
  - d) Deputy Director(DI), AH&Veterinary Department Member Secretary
  - e) Joint Director (Planning), AH&Veterinary Department Member
  - f) Joint Director (Admn), AH&Veterinary Department Member
  - g) Chief Vety. Officer(CM&VD), AH&Veterinary Department Member
  - h) Deputy Director (Accounts), AH&Veterinary Department Member
- c. Notification for constitution of District Monitoring Unit vide no. D.22011/25/2018-AH&V of 25th October, 2019.
  - a) Commr. & Secretary, AH&Veterinary Department Chairman
     (Appointed by Dept. of AH&Dairying, Govt. of India)
  - b) Director, AH&Veterinary Department Ex-Officio Member (Appointed by Dept. of AH&Dairying, Govt. of India)
  - c) Deputy Directort (REP), AH&Veterinary Department Member Secretary
  - d) Joint Director (LH), AH&Veterinary Department
     e) Deputy Director (DI), AH&Veterinary Department
     f) Deputy Director (H), AH&Veterinary Department
     Member
     Member
  - g) Veterinary Officer (LH), AH&Veterinary Department Member
  - h) Veterinary Officer (DI Lab), AH&Veterinary Department Member
- d. Notification to all District Magistrates for constitution of District Monitoring Unit vide no. B.22011/25/2018-AH&V of 30<sup>th</sup> October, 2019 (Action to be taken by Deputy Commissioner and DVO of concerned Districts)

# **Guidelines for FMD and Brucellosis Vaccination, 2020**

SI. No.	Activities	Action Taken
1	The New National Animal Disease Control Programme of FMD and Brucellosis aims to control FMD and Brucellosis by 2025 and eradication by 2030	
2	FMD vaccine should be given at 2ml I/M for cattle, buffalo and pigs whereas, sheep and goats should be given at 1ml I/M	
3	First time FMD vaccinated animals should be given a booster dose after 30 days of vaccination.	
4	For new vaccinations, eartag and Animal Health Card should be issued one month before actual date of vaccination.	
5	Brucellosis vaccine should be given only to 4-8 months old cattle, mithun and buffalo heifers. Vaccination interval between FMD and Brucellosis vaccine should not be less than 30 days. Needles and syringes used for Brucellosis vaccination should be discarded properly by burning as the disease is zoonotic.	
6	Hypodermic needles should be used for single injection only.  Syringes however may be re-used if maintained in a clean and hygienic state	
7	Same syringe should not be used for different vaccines.	
8	Animals should be dewormed 1 month before the actual vaccination date.	
9	Eartag is mandatory for all vaccinated animals and may be reported in NADRS portal only after issuance of Animal Health Card.	
10	Eartag and Animal Health Card number (UID) is necessary for data validation in NADRS portal.	
11	Eartag, Animal Health Card and Vaccination data should be submitted daily by the VFA to the Doctor, which will again be uploaded to the NADRS system. The compiled data will then be forwarded to the District headquarters/Administration Head.	
12	<ul> <li>Training and Awareness Campaign Schedule: <ol> <li>Permanent wall painting should be completed 1 month before vaccination.</li> <li>District level training may be conducted for Doctors and VFA under the District headquarters/ Administration Head. Tentative training calendar should be submitted to the Directorate Resource Person will be arranged from Directorate of AH&amp;Veterinary.</li> <li>Block level training for VFAs should be conducted by the concerned Doctors within 15 days to 1 month before the actual date of vaccination.</li> </ol> </li> </ul>	

	<ul> <li>iv. Village level training cum Awareness Campaign should be conducted for different villages within block. The training may be conducted 15 days before the actual date of vaccination.</li> <li>v. Information regarding vaccination programs and preparations via print and electronic media, should be given out 1 week before actual date of vaccination. Information should be given via public information mic for two days before the actual date of vaccination.</li> </ul>	
13	Pre-vaccination and post-vaccination serum samples should be collected from the slected villages. Pre and post-vaccination serum samples should be collected from the same animal. Post vaccination serum should be collected after 20 – 25 days of vaccination.	
14	Pre-vaccination serum sample collection, issue of Animal health card and vaccination programs may be conducted simultenuously. Ear tagging, Animal health card and vaccination status are necessary reference data for the department and therefore proper entry and maintenance of records is a must.	
15	100 percent coverage of FMD and Brucellosis vaccination in livestock is the primary target, therefore, it is of prime importance to convince the farmers for co-operation and compliance.	
16	Eartag and Animal health card should be issued one moth before the actual date of vaccination and records should be maintained properly.	

## Role of District A.H. & Veterinary Officer / Polyclinic / Dispensary Incharges for FMD Sero Surveillance

SI. No.	Activities	Action Taken
1	DVO shall be responsible for training of staff engaged in sero-surveillance programme 2.5 months after the date of vaccination programme and should prepare calendar of operation with the help of District A.H & Veterinary Officer and Block Officers.	
2	DVO shall be responsible in ensuring that required logistics for sero-surveillance including manpower for carrying sero-surveillance are in place at least 3.5 months after the start of the vaccination programme. Necessary transportation facility must be provided for the sample collection team.	
3	DVO shall supervise sero-surveillance programme and provide all necessary required infrastructure facilities, transportation arrangement, sample collection vials and vaccutainers, etc.	
4	DVO shall provide publicity at local level at least 1 month before actual sample collection using leaflets, pamphlets, posters, etc. to village panchayat, cattle herds, etc.	
5	Collection of samples is the primary responsibility of the DVO with the help of the District Diagnostic Laboratory and District Polyclinic in coordination with the block veterinary officer.	
6	The blood is usually collected from jugular vein. After collection, the sample should be allowed to stand in a cool area out of direct sunlight for at least 15 minutes to allow clot formation.	
7	At least 2ml of serum should be submitted to the laboratory and for that, 4-8ml of whole blood must be collected without anti-coagulant.	
8	The sample should be centrifuged or if not available, stand the sample in an upright position overnight in a cool box of refrigerator. DVO has to ensure that no haemolysis or RBC are present in the serum samples.	
9	Place the serum in a sterile tube with proper labeling and send to the laboratory under cool condition	
10	DVO shall ensure maintenance of cold chain, as prescribed, in ice box at the time of transport or serum samples.	
11	If dispatch to a laboratory is delayed, serum samples should be frozen and stored at 20oC.	
12	Serum should be accompanied by proper epidemiological data	
13	DVO shall supervise proper disposal of bio-medical waste generated during sero-surveillance.	
14	The District A.H. & Veterinary Officer is responsible for facilitating the transportation of samples from the District Laboratory of FMD Testing Laboratory at the State level within 7 days after collection of samples	

# Responsibilities of the Block Veterinary Officers / Veterinary Officers Under National Animal Disease Control Programme (NADCP)

SI. No.	Activities	Action Taken
1	Block Veterinary Officer (BVO) at block level shall ensure the supply of vaccine to field officers as per the calendar of vaccination. For example, village wise vaccination plan for FMD-CP should be prepared in each block so as to start vaccination from border villages.	
2	Block Veterinary Officer (BVO) shall ensure availability of adequate vaccine stock as per eligible animal population and ensure maintenance of cold chain. In this regard, Block Veterinary Officer (BVO) should also have knowledge of vaccine vial monitors (VVM) and how the same are to be interpreted. This information should also be given to the vaccinator by the Block Veterinary Officer (BVO).	
3	Block Veterinary Officer (BVO) shall ensure all pre-requisite of the vaccination programme like trained manpower, vaccine carriers, syringes, needles, biological waste deposit bags, personnel protective equipment (apron, hand glove, plain protecting glass), ear-tags, ear-tagging machines, transport of vaccine, etc., before starting actual vaccination in the block.	
4	Block Veterinary Officer (BVO)/vaccinator shall obtain the vaccine doses from District A.H. & Veterinary Officer (DVO) in vaccine carriers with gel / icepacks. The gel packs should have been stored in cold cabinets at 200C for 48 hours.	
5	Block Veterinary Officer (BVO) shall ensure that separate disposable needle is used for vaccination of each animal.	
6	Block Veterinary Officer (BVO) shall ensure that technicians involved in ear-tagging are aware of the procedure and enter relevant details required as per the animal health module of INAPH.	
7	Block Veterinary Officer (BVO) shall ensure that animal health cards with recorded details of vaccinated animals are issued to animal owners. Each animal shall be issued a Vaccination card and thereafter Block Veterinary Officer (BVO) shall ensure these cards have been handed over to the animal owner.	
8	Block Veterinary Officer (BVO) shall help in collecting pre- vaccinated and post-vaccinated sera samples for laboratory analysis.	
9	Block Veterinary Officer (BVO) shall provide publicity material at local level such as leaflets, pamphlets, posters, etc., to village panchayat, cattle market authorities and sugar factory authorities, etc	
10	Block Veterinary Officer (BVO) shall take support of Block Development Officer, local leaders and key person(s) in the area, women self-help groups, youth organizations, etc., for effective implementation of the programme.	

11	In case of suspicion of outbreak or confirmation of FMD outbreak, Block Veterinary Officer should implement all necessary control and containment measures immediately and also report the suspected / confirmed outbreak through the National Animal Disease Reporting System (NADRS).	
12	The Block Veterinary Officer (BVO) of Veterinary Institutes with his team shall vaccinate all eligible animals as per programme norms.	
13	During the vaccination campaign, it should be ensured that vaccine bottles are continuously kept in vaccine carriers when not in immediate use so that cold-chain is maintained.	
14	Vaccinators shall ensure that vaccine bottles once opened (punctured) should be used on the same day itself to avoid deterioration of potency / quality of vaccine.	
15	Vaccinators shall take care to avoid spillage of vaccine during filling up the syringe	
16	If the animal becomes ferocious or gets disturbed while carrying out vaccination thereby leading to spilling of the vaccine, it shall be ensured that such animals are once again vaccinated properly.	
17	Vaccinator shall hand over the vaccination card, duly signed by the Veterinary Officer, to every animal owner after vaccinating the particular animal.	
18	Block Veterinary Officer (BVO) of Veterinary Institutes shall monitor the vaccination programme in the villages under its jurisdiction and shall ensure participation of village officers, panchayat, gram sevaks, key person(s) and local leaders of the village(s).	
19	He / she shall provide information about the control programme, its importance and impact to the villagers through discussion, leaflets, pamphlets, posters, visual aids during training and awareness programmes, etc., so as to encourage the farmers to vaccinate their animals.	
20	Appropriate disposal of used / waste materials or any other bio-medical waste generated also need to be ensured by the BVO.	

Phase	Phase State Sl.No	State/UT	State/UT	Distirct Name	Name of State Nodal Officer (State AH Dept.)	Mobile	E-Email
3	645	Mizoram	State	AIZAWL	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	646	Mizoram	State	СНАМРНАІ	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	647	Mizoram	State	KOLASIB	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	648	Mizoram	State	LAWNGTLAI	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	649	Mizoram	State	LUNGLEI	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	650	Mizoram	State	MAMIT	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	651	Mizoram	State	SAIHA	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in
3	652	Mizoram	State	SERCHHIP	Dr. Lalhmingthanga	9436142315	dr.hminga@mizoram.gov.in

Name of NAFED Nodal Officer	Mobile	E-Email	Name of District Nodal Officer (State AH Dept.) with complete address	Mobile	E-Email
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. Lalnghinglova</b> District A.H. & Vety Office, Khatla, Aizawl, Mizoram - 796001	9366736063/9436150939	nghinglova24@gmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. B. Zonghinga</b> District A.H. & Vety Office, Vengsang, Champhai, Mizoram - 796321	9436371284	dr.b.zoa@gmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. EngkungaChhangte</b> District A.H. & Vety Office, Project Veng, Kolasib, Mizoram - 796081	9436158850/8730978897	engkungachhangte@gmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. Lalrintluanga</b> District A.H. & Vety Office, Bazar Veng, Lawngtlai, Mizoram - 796891	8730971283/9436144703	tluangteakhawlhring68#gmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. Vanlalhruaia</b> District A.H. & Vety Office, ChanmariVeng, Lunglei, Mizoram - 796691	9436147667	drhruaitea@gmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. R. L. Tanpuii</b> District A.H. & Vety Office, Mamit, Mizoram - 796441	8413062438	drtanpuii@rediffmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. Sahlu Khaila</b> District A.H. & Vety Office, Siaha, Mizoram - 796901	9436149748	sahlukhaila12@gmail.com
Mr. Sadananad	8210873190	nafguw@nafed- india.com	<b>Dr. C. Zarzokima</b> District A.H. & Vety Office, Serchhip, Mizoram - 796181	9436143960/9862837503	drzarachhakchhuak29@gmail.com

# LIST OF VETERINARY OFFICER FOR IMPLEMENTATION OF NATIONAL ANIMAL DISEASE CONTROL PROGRAMME ON FMD AND BRUCELLOSIS

SI No.	Name of Officer appointed as Block Veterinary Officer	Name of Block
1.	Dr. Lalbiakzuala Sailo, V.O. Polyclinic Hospital	Tlangnuam Block, Part – I
2.	Dr. Vanlalhruaia Pachuau, V.O, Durtlang	Tlangnuam Block, Part – II
3.	Dr. Ch. Lalthafamkima, V.O., Sihphir	Tlangnuam Block, Part – III
4.	Dr.V. Vanneitluanga, M.I., Slaughter House	Aibawk Block
5.	Dr. Lalhmangaiha, V.O., Darlawn	Darlawn Block
6.	Dr. Lalsanglien Ralsun, V.O, Saitual	Phullen Block
7.	Dr. Amos Vanlalhruaia, V.O, Thingsulthliah	Thingsulthlioah Block
8.	Dr. M.S. Dawngliana, V.O, Vaphai	Khawbung Block
9.	Dr. Lalrinhlui, V.O., Ruantlang	Champhai Block
10.	Dr. Phillip Lallawmzuala, V.O., Khawzawl	Khawzawl Block
11.	Dr. Lalnunpuii Zadeng, V.O., Ngopa	Ngopa Block
12.	Dr. Zohlimpuia, V.O., Bairabi	Bilkhawthlir Block
13.	Dr. H. Pachhunga, V.O., Kolasib	Thingdawl Block
14.	Dr. Charlie C. Chawngthu, V.O., Lawngtlai	Bungtlang 'S' & Lawngtlai
15.	Dr. Lalrinkimi, V.O., S. Vanlaiphai	Sangau Block
16.	Dr. C. Lalnunpuia, V.O., N. Vanlaiphai	E. Lungdar Block
17.	Dr. H. Vanlalrawna, V.O., Serchhip	Serchhip Block
18.	Dr. George Martin Lalruattluanga, V.O., Tlabung	Chawngte & Bunghmun
19.	Dr. C. Sanghluna, V.O., Hnahthial	Hnathial Block
20.	Dr. Lalramdintluanga, V.O., Lunglei	Lunglei Block
21.	Dr. K. Lalhlimpuii, V.O., Tlabung	Lungsen Block
22.	Dr. P.C. Lalrokima, C.V.O. Mamit	Reiek Block
23.	Dr. Jonathan Lalremsanga, V.O., W. Phaileng	W.Phaileng Block
24.	Dr. Lalrinawma Khiangte, V.O., Zawlnuam	Zawlnuam Block
25.	Dr. Lalrengpuii Sailo, V.O., Siaha	Siaha Block
26.	Lalthansanga Khiangte, V.O., Tuipang	Tuipang Block

SI. No.	District / Establishment	Name of Veterinary Officer	Block Jurisdiction	Village to be covered for Block Area Awareness Campaign
1.	Polyclinic Hospital	Dr. Lalbiakzuala Sailo, V.O., Polyclinic Hospital	Tlangnuam Block	All the villages under Aizawl Municipal Area excluding Durtlang and Selesih
2.	Aizawl	Dr. Vanlalhruaia Pachuau, V.O., Durtlang	Tlangnuam Block	Sairang, Khamrang, Lungleng – I, Mualkhang, Muthi, N. Lungleng, Samtlang, Tuirial, Tuirial Airfield, Durtlang (all villages under Durtlang Town)
3.	Aizawl	Dr. Ch. Lalthafamkima, V.O., Sihphir	Tlangnuam Block	Lungdai, Lungmuat, Nausel, Neihbawih, Nisapui, Sentlang, Serkhan, Sihphir (all villages under Sihphir Town), Selesih
4.	Aizawl	Dr. V. Vanneitluanga, M.I., Slaughter House	Aibawk Block	Aibawk, Chamring, Chawilung, Falkawn, Hmuifang, Hualngohmun, Kelsih, Lamchhip, Lungsei, Maubuang, Melriat, Muallungthu, Paikhai, Phulpui, Sailam, Samlukhai, Sateek, Sialsuk, Sumsuih, Tachhip, Thiak
5.	Aizawl	Dr. Lalhmangaiha, V.O., Darlawn	Darlawn Block I + Phullen Block	Chhanchhuahna Khawpui, Darlawn Chhim Veng, Darlawn Venghlun, Darlawn Vengpui, E. Phaileng, Hmunghak, Kepran, Khanpui, Khawruhlian, Lailak, N. Serzawl Pehlawn, Sailutar, Sawleng, Sunhluchhip,  Daido, Khawlian, Lamherh, Luangpawn, N.E. Tlangnuam, N. Khawlek, Phuaibuang, Phullen, Suangpuilawn, Thanglailung, Vanbawng, Zawngin
6.	Aizawl	Dr. Lalsanglien Ralsun, V.O., Saitual	Darlawn Block II	Khawpuar, Lower, Sakawrdai, Lungsum,

				Mauchar, New Vervek, N. Khawdungsei, N. Tinghmun, Palsang, Ratu, Sakawrdai, Thingsat, Upper Sakawrdai, Vaitin, Vervek New Vervek, Damdiai, Zohmun, Zokhawthiang,
7.	Aizawl	Dr. Amos Vanlalhruaia, V.O., Thingsulthliah	Thingsulthliah Block	Thingsulthliah, Aichalkawn, Buhban, CTI Sesawng, Darlawng, Dilkhan, Edenthar, Lenchim, Maite, Mualmam, Mualpheng, N. Lungpher, Phaibawk, Phulmawi, Saisih Vety Farm, Seling, Sesawng, Sihfa, Tawizo, Thingsul Tlangnuam, Tlungvel, Tualbung, Tuikhurhlu
8.	Champhai	Dr. M.S. Dawngliana, V.O., Vaphai	Khawbung Block	Buang, Bulfekzawl, Bungzung, Dungtlang (New), Dungtlang (Old), E. Chawngtui, Farkawn, Hruaikawn (New), Hruaikawn (Old), Khankawn, Khuangleng, Khuangthing, Leisenzo, Leithum, Lianpui, Samthang (New), Samthang (Old), Sazep, Sesih, S. Khawbung, Thekpui, Thekte, Vangchhia, Vanzau, Vaphai, Zawlsei, Zawngtetui
9.	Champhai	Dr. Lalrinhlui, V.O., Ruantlang	Champhai Block	Hnahlan, Khuangphah, Lungphunlian, Murlen, N.E. Diltlang, Ngur, N. Khawbung, Tualcheng, Tuipui, Vaikhawtlang, Vapar, all villages under Champhai Town
10.	Champhai	Dr. Phillip Lallawmzuala, V.O., Khawzawl	Khawzawl Block	Aiduzawl, Arro, Chalrang, Chawngtlai, Chhawrtui, Dilkawn, Dulte, Hmuncheng, Kawlkulh, Kelkang, Khualen, Lungtan, Melbuk (Khawnuam), Mualkawi, Neihdawn, New

				Chalrang, Ngaizawl, Pamchung, Puilo, Rabung, Riangtlei, Sialhawk, Tlangmawi, Tlangpui, Tualpui, Tualte, Vangtlang, Vankal, Zokhawthar.
11.	Champhhai	Dr. Lalnunpuii Zadeng, V.O., Ngopa	Ngopa Block	Changzawl, Chiahpui, Hliappui, Hliappui S, Hrianghmun, Kawlbem, Khawkawn, Lamzawl, Mimbung, N.E. Khawdungsei, Ngopa, Pawlrang, Saichal, Selam, Teikhang, Tualbung
12.	Kolasib	Dr. Zohlimpuia, V.O., Bairabi	Bilkhawthlir Block	Bilkhawthlir North, Bilkhawthlir South, Buhchangphai, Bukvannei, Chemphai, Chite, Meidum, N. Chawnpui, N. Chhimluang, N. Thinglian, Pangbalkawn, Phainuam, Phaisen, Saihapui K, Saihapui V, Saihapui, Saipum, S. Chhimluang
13.	Kolasib	Dr. H. Pachhunga, V.O., Kolasib	Thingdawl Block	Bukpui, Hortoki, Khamrang, Lungdai, Lungmuat, Mualkhang, Mualvum, N. Chaltlang, N. Hlimen, Nisapui, Rajtali, Serkhan, Sethawn, Thingdawl, Thingthelh, Zanlawn
14.	Lawngtlai	Dr. Charlie C. Chawngthu, V.O., Lawngtlai	Bungtlang 'S'	Bolisora, Bungtlang S-I, Bungtlang S-II, Chamdur 'P'-I, Chamdur 'P'-II, Chamdurtlang-I, Chamdurtlang-II, Chikhurlui, Damlui, Dumzautlang, Fangfarlui, Jognasuri, Kawnkhua, Laitlang, Mautlang, M. Kawnpui, Nghalimlui, Ngunlingkhua, Pandawnglui, Sabualtlang, Saikhawthlir, T. Dumzau, Tuichawngtlang, Tuidangtlang, Tuisentlang, Vathuampui, Vaseikai

			Lawngtlai	AOC Veng, Chawngtelui, Chawnhu, College Veng, Darnamtlang, Electric Veng, Hmawngbuchhuah, Hmunnuam, Kakichhuah, Karlui-II, Kawrthindeng, Lawngtlai-III, Lawngtlai Vengpui, Mampui, Ngengpuikai, Paithar, R. Vanhne, Saikah U, Sakeilui-I, Sihtlangpui, Thingkah, Tuikhurlui, Zochachhuah, Bethel Veng, Chawngte 'P', Chawntlangpui, Council Veng, Diltlang 'S', Hmawngbu, Hmunlai, Hruitezawl, Karlui-I, Kawlchaw 'W', Lawngtlai Bazar, Lawngtlai-IV, Lunghauka, Mualbu 'L', Ngengpuitlang, Rulkual, Saibawh, Saizawk 'E', Sakeilui-II, Sumsilui, Tuidangtlang, Tuithumhnar Archhuang, Bualpui Ng-I,
15.	Lunglei	Dr. Lalrinkimi, V.O., S. Vanlaiphai	Sangau Block	Bualpui Ng-II, Cheural, Lungtian-I, Lungzarhtum, Rawlbuk, Sangau-II, Sangau-IV, Siachangkawn, Tialdawnglui, Vartekkai, Vawmbuk-II (Vaivakawn), Lungpher S, Lungtian-II, Pangkhua, Sangau-I, Sangau-III, Sentetfiang, Thaltlang, Vartek, Vawmbuk
16. 17.	Serchhip Serchhip	Dr. C. Lalnunpuia, V.O., Thingsai Dr. H. Vanlalrawna,	E. Lungdar Block	Bawktlang, Chekkawn, E. Lungdar, Khawlailung, Leng, Lungchuan, Lungkawlh, Mualcheng, N. Mualcheng, Piler, Sailulak, Sialsir, N.Vanlaiphai, Mualcheng, Thingsai, Bualpui 'H', Cherhlun, Ngharchhip, New Ngharchhip. Baktawng, Buangpui,

		V.O., Serchhip	Block	Buhkangkawn, Chanin, Chhiahtlang, Chhingchhip, Chhuanthar Tlangnuam, E. Bungtlang, E. Thinglian, Hmawngkawn, Hmuntha, Hmunzawl, Hriangtlang, Hualtu, Keitum, Khawbel, Khumtung, Lungpho, Mualpui Chhingchhip, Neihloh, Ngentiang, Rullam, Sialhau, Thentlang, Vangchengpui, Vanchengte, Serchhip Town
18.	Lawngtlai District	Dr. George Martin Lalruattluanga, V.O., Tlabung	Chawngte	Adubangasora, Ajasora-I, Ajasora-II, Ajasora-III, Arotinagar, Baganpara, Bajeisora, Bandukbanga, Baraguisury, Barapansury-I, Barapansury-II, Barkalak, Barkobakhali, Barkobakhali-II, Betbonya, Billosora, Boranasury, Boroituli, Chaminisora, Charluitlang, Chongrasury, Chotoguisury-I, Chotoguisury-I, Chotoguisury-II, Devasora 'N', Devasora 'S', Dursora, Fulsora, Fultuli, Futsury, Gabasury, Gerakuluksora, Gerasury, Golasury, Gulsingbapsora, Jamersury, Jaruldubosora, Jarulsury, Jaruldubosora, Jarulsury, Jarulsury-II, Kamalanagar-I, Kamalanagar-III, Kamalanagar-III, Kamalanagar-IV, Kamtuli, Kurkurduleya, Kurbalovasora, Lakkisury, Longpuighat, Longpuighat- II, Ludisora, Mainabapsora- I, Mainabapsora-II, Mandirasora, Massury, Montola, Nagdarasora, Nalbonya, New Jaganasury- I, New Jaganasury-II, New

				Jaganasury-III, Old Bajeisora, Palenosora, Parva-I, Parva-II, Parva-III, Parva-IV, Rajamandal, Rangkashya, Samuksora, Sillosora, Silsury, Simeisury, Siminasora, Tungosora, Udalthana-I, Udalthana-II, Ugalsury, Ugudasury 'N', Ugudasury 'S', Ulusury, Vaseitlang-I, Vaseitlang-II, W. Saizawh
	Lunglei District		Bunghmun Block	Bandiasora, Changpui, Devasuri, Kawlhawk, Lokisuri, Malsuri, Mar 'S', New Khawlek, Phainuam, Sachan, Salmar, Serte, Sesawm, S. Lungdai, Terabonia, Tleu, W. Bungtlang, Buarpui, Dengsur, Hmundo, Laisawral, Lungchem, Hmawngbu, Mauzam, New Sachan, Puankhai, Saisen, S. Belkhai, Sertlangpui, S. Khawlek, Sumasumi, Thenhlum, W. Bunghmun
19.	Lunglei	Dr. C. Sanghluna, V.O., Hnahthial	Hnahthial Block	Aithur, Cherhlun, Denlung, Khawhri, Lungpuitlang, Muallianpui, Bualpui H, Darzo, E. Rotlang, Leite, Maudarh, New Ngharchhip, Old Ngharchhip, Rawpui, S. Lungleng, Tarpho, Thingsai, Pangzawl, S. Chawngtui, S. Vanlaiphai, Thiltlang, Tuipui (Darzokai)
20.	Lunglei	Dr. Lalramdintluanga, V.O., Lunglei	Lunglei Block	Bualpui 'V', Bualte, Buknuam, Chengpui, Chhipphir, Chithar, Dawn, Haulawng, Hlumte, Hmuntlang, Kawmzawl, Lungmawi, Mamte, Mausen, Mualthuam 'S', N. Mualthuam, Pachang, Ralvawng, Ramlaitui, Runtung, Sairep, Sekhum,

				S. Kanghmun, S. Mualcheng, S. Phaileng, S. Tawipui, S. Zote, Tawipui 'N' – I, Tawipui 'N' – II, Thaizawl, Thangpui, Thangte, Thehlep, Thingfal, Thlengang, Thualthu, Thuampui, Vaisam, Vanhne, Zotuitlang, all Lunglei Town Andermanik, Balukiasuri,
21.	Lunglei	Dr. K. Lalhlimpuii, C.V.O., Tlabung	Lungsen Block	Balungsuri, Belpui (Matiasora), Belthei, Bindiasora, Bornasuri, Chawngte 'L', Chhuahthum, S. Chawilung, Sedailui, Serhuan, Sihphirtlang, Sihtlang, Silkur, South Lungrang, Sugarbasora, Thanzamasora, Chhumkhum, Diplibagh (Kawizau), Gulsil, Gurusora, Hmunthar, Kalapani, Kauchhuah, Khawmawi, Khojaisuri, Khojoisuri (New), Khojoisuri (Old), Lalnutui, Lamthai-I,. Lamthai-II, Lamthai-III, Letisuri, Lungsen, Mautlang, Muriskata, New Balukiasuri, New Lungrang, Ngiautlang, Nunsuri, Pangtlang, Phairuangchhuah, Phairuangkai, Putlungasih, Thekaduar, Tiperaghat-I, Tiperaghat-II, Tiperaghat- III, Tuichawng, Tuichawng, Tuichawngchhuah, Tuisen Bolia, Tuisen Chhuah, Ukdasuri (Tuilet), Vairawkai, W. Rotlang, Zawlpui, Zehtet, Zohmun, Zuangzawl, Rangte, Rolui, Rualalung, Sailen, SAmuksuri (Chengkawllui)

22.	Mamit	Dr. P.C. Lalrokima, C.V.O., Mamit	Reiek Block	Ailawng, Bawlte, Bawngthah, Chungtlang, Dapchhuah (Tutphai), Darlung, Dilzawl, Hmunpui, Hreichuk, Khawrihnim, Lengte, Lungphun, Nghalchawm, N. Kanghmun, Rawpuichhip, Reiek, Rulpuihlim, Saitlaw, S. Sabual, Tuahzawl, W. Lungdar, W. Serzawl
23.	Mamit	Dr. Jonathan Lalremsanga, V.O., W. Phaileng	W.Phaileng Block	Andermanik, Damparengpui, Hnahva, Hruaitluang, Hruiduk, Kawnmawi, Khawhnai, Lallen, Marpara North, N. Chhippui, Parvatui, Phuldungsei, Pukzing, Pukzing Vengthar, Saithah, Silsuri, Tuirum, W. Phaileng, W. Phulpui, Zawlpui, Zomuantlang, Zopui
24.	Mamit	Dr. Lalrinawma Khiangte, V.O., Zawlnuam	Zawlnuam Block	Bajirungpaveng, Bawngva, Belkhai, Bungthuam, Chilui, Chuhvel, Damdiai, Dampui, Darlak, Hriphaw, Kananthar, Kanhmun, Kawrtethawveng, Kawrthah, Khanthuam, Khantlang, Kolalian, K. Sarali, Luimawi, Mualthuam, Nalzawl, New Eden, N. Sabual, N. Tlangkhang, Phaizau, Rajivnagar, Rengdil, Saikhawthlir, Serhmun, Zamuang, Zawlpui, Sihthiang, Sotapa Veng, Suarhliap, Thaidawr, Thinghlun, Tuidam, Tuipuibari, Tuirum, Tuipanglui, Vawngawnzo, W. Bunghmun, W. Damdiai
25.	Siaha	Dr. Lalrengpuii Sailo, V.O., Siaha	Siaha Block	Ainak, Chakhang-I, Chhuarlung-I, Chhuarlung- III, College Veng-II, ECM

				Veng, Kawlchaw East-II, Lungbun-II, Maubawk L, Meisatla-II, Meisaviah West, New Colony-II, New Colony-IV, New Siaha E-II, Niawhtlang-I, Niawhtlang- III, Phalhrang, Riasikah, Saihatlangkawn-II, Saiha Vengpui-I, Saiha Vengpui- III, Siata-I, Theiva, Thingsen, Tuisumpui, Chakhang-I, Chakheitla, Chhuarlung-II, College Veng-I, Council Veng, Kawlchaw East-I, Lungbun-I, Maubawk CH, Meisatla-I, Meisavaih East, New Colony-I, New Colony-III, New Siaha E-I, New Siaha West, Niawhtlang-II, Old Tuisumpui, Rawmibawk, Saihatlangkawn-II, Saiha Vengpui-II, Siasi, Siata-II, Thiahra, Tuipui Ferry, Zero Point
26.	Siaha	Dr Lalthansanga Khiangte, V.O., Tuipang	Tuipang Block	Ahmypi, Bymari, Chapui-I, Chapui-II, Chapui-III, Chheihlu, Kaisie, Khopai, Laki-I, Laki-II, Latawh, Lawngban, Lawngmasu, Lorrain Ville, Lungdar, Lungpuk-I, Lungpuk-II, Lungpuk-III, Maisa, Mawhre, Miepu-I, Miepu-II, New Latawh, New Serkawr, Phura-N, Phura-S, Saikao B, Serkawr, Siatlai, Theiri, Tongkolong, Tuipui D-I, Tuipui D-II, Tuipang 'L', Tuipang V-I, Tuipang V-II, Tuisih-II, Vahai, Zawngling, Zawngling B, Zawngling Lotai

# Estimated Financial Expenditure for CVO and VO for Block Level Awareness Campaign and Training

SI	Name of District /	Name of Veterinary			
No.	Establishment	Officer	Block	Amount	Sub Total
		Dr. Lalbiakzuala Sailo,	Tlangnuam	20,000.00	
1.	Polyclinic Hospital	V.O.	Block, Part-I		40,000.00
	, ,	Dr. Vanlalhruaia	Tlangnuam	20,000.00	,
		Pachuau, V.O. Dr. Ch.	Block, Part-II	20,000,00	
		Lalthafamkima, V.O.	Tlangnuam Block, Part-III	20,000.00	
		Dr. V.Vanneitluanga,	Aibawk Block	20,000.00	
	<u>-</u>	V.O.	/ II DOWN BIOCK	20,000.00	
	District A.H. &	Dr. Lalhmangaiha,	Darlawn Block	20,000.00	4 00 000 00
2.	Veterinary Office, Aizawl	V.O.		,	1,00,000.00
	Alzawi	Dr. Lalsanglien	Phullen Block	20,000.00	
		Ralsun, V.O.			
		Dr. Amos	Thingsul Block	20,000.00	
		Vanlalhruaia, V.O.			
		Dr. M.S. Dawngliana,	Khawbung	20,000.00	
	D:-+:-+ A 11 0	V.O.	Block	20,000,00	
3.	District A.H. &	Dr. Lalrinhlui, V.O.	Champhai Block	20,000.00	80 000 00
3.	Veterinary Office, Champhai	Dr. Lalnunpuii Zadeng, V.O.	Ngopa Block	20,000.00	80,000.00
		Dr. Philip	Khawzawl Block	20,000.00	
		Lawmsangzuala, V.O.	I I I I I I I I I I I I I I I I I I I	20,000.00	
	D: 1 : 1 A II 0	Dr. H. Pachhunga,	Bilkhawthlir	20,000.00	40,000.00
1	District A.H. &	V.O.	Block		
4.	Veterinary Office, Kolasib	Dr. Zohlimpuia, V.O.	Thingdawl	20,000.00	
	KOlasib		Block		
	District A.H. &	Dr. Charlie C.	Bungtlang 'S' &	40,000.00	
5.	Veterinary Office,	Chawngthu, V.O.	Lawngtlai		60,000.00
	Lawngtlai	Dr. Labrialdinai V.O.	Blocks	20,000,00	,
		Dr. Lalrinkimi, V.O. Dr. H. Vanlalrawna,	Sangau Block Serchhip Block	20,000.00	
	District A.H. &	V.O.	Sercimp block	20,000.00	
6.	Veterinary Office,	Dr. C. Lalnunpuia,	E. Lungdar	20,000.00	40,000.00
	Serchhip	V.O.	Block		
	District A.H. &	Dr. C. Sanghluna, V.O.	Hnahthial Block	20,000.00	
7.	Veterinary Office,	Dr. Lalramdintluanga,	Lunglei Block	20,000.00	40,000.00
	Lunglei	V.O.			
		Dr. K. Lalhlimpuii,	Lungsen Block	20,000.00	
	Chief Veterinary	C.V.O.			
8.	Office, Tlabung	Dr. George Martin	Chawngte &	40,000.00	60,000.00
		Lalruattluanga, V.O.	Bunghmun		
		Dr. B.C. Latrakima	Blocks Reiek Block	20,000.00	
	District A.H. &	Dr. P.C. Lalrokima, C.V.O.	NEIER DIUCK	20,000.00	
9.	Veterinary Office,	Dr. Lalrinawma	Zawlnuam	20,000.00	60,000.00
	Mamit	Khiangte, V.O.	Block	20,000.00	
		1	1	l	

		Dr. Jonanthan	W. Phaileng	20,000.00	
		Lalremsanga, V.O.	Block		
	District A.H. &	Dr. Lalrengpuii Sailo,	Siaha Block	20,000.00	
10.	Veterinary Office,	V.O.			40,000.00
	Siaha	Dr. Lalthansanga	Tuipang Block	20,000.00	·
		Khiangte, V.O.			
Grand Total = 5,6					5,60,000.00

Note:- Fund is to be transferred to DVO from Directorate and DVO has to release the fund against CVO and VO concern in full, actual utilization to be carried out by CVO and VO in their jurisdiction mentioned.

## **Distribution of cold chain facilities to various establishments**

SI No	District	Name of Establishment	300 litre capacity deep freezer	253 litres capacity refrigerator double door	215 litres capacity refrigerator single door	1.4 lires capacity vaccine carrier (medium size)	0.9 litres capacity vaccine carrier (small size)	Remarks
1	Aizawl	District AH & Veterinary Office	-	-	-	5	10	
		Polyclinic Hospital	-	1	-	10	10	
		Veterinary Dispensary, Durtlang, Aibawk, Sihphir, Saitual, Darlawn, Ratu, Thingsulthliah	-	7	1	1	-	
		RAHC: Kulikawn, Salem, Bethlehem, Dinthar, Republic, Lawipu, Vaivakawn, Luangmual, Tanhril, Chanmari, Bawngkawn, Zemabawk, Ramhlun, Ramthar, Armed Veng, Sairang, Lengpui, Sialsuk, Hlimen, Melriat, Muallungthu, Hmuifang, Samlukhai, Sesawng, Khawruhlian, E Phaileng, Suangpuilawn, Phullen	-	-	28	-	-	
	Sub-Total (1)			8	28	15	20	
2	Lunglei	District AH & Veterinary Office	1	-	-	10	10	
		District Veterinary Hospital	-	1	-	-	-	
		Principal, SVSc	-	1	-	-	-	
		Veterinary Dispensary: S. Vanlaiphai, Hnahthial, Haulawng, Lungsen, Tlabung	-	5	-	-	-	

SI No	District	Name of Establishment	300 litre capacity deep freezer	253 litres capacity refrigerator double door	215 litres capacity refrigerator single door	1.4 lires capacity vaccine carrier (medium size)	0.9 litres capacity vaccine carrier (small size)	Remarks
		RAHC: Thingfal, Tawipui N, Tawipui S, Leite, Zobawk, Theiriat, Lunglawn, Rahsi veng, Bazar, Pukpui, Hauruang, Sertlangpui, Buarpui, Chhipphir, Mualthuam N, Darzo, Muallianpui, Phairuangkai, Lungrang S, Thenhlum	-	-	20	-	-	
	Sub-Total (2)		1	7	20	10	10	
	Siaha	District AH & Veterinary Office	1	-	-	8	8	
3		District Veterinary Hospital	ı	1	-	-	-	
3		   Veterinary Dispensary, Tipa	-	1	-	-	-	
		RAHC : Chhaolo, Chakhei	-	-	2	-	-	
	Sub-Total (3)		1	2	2	8	8	
	Champhai	District AH & Veterinary Office	1	-	-	5	5	
4		District Veterinary Hospital	-	1	-	-	-	
		Veterinary Dispensary: Khawzawl, Ngopa, Vaphai, Hnahlan	-	4	-	-	-	
	Sub-Total (4)		1	5	0	5	5	
	Kolasib	District AH & Veterinary Office	1	-	-	5	5	
5		District Veterinary Hospital	-	1	-	-	-	
		Veterinary Dispensary: Lungdai, Kawnpui, Vairengte, Bairabi	-	4	-	-	-	
	Sub-Total (5)		1	5	0	5	5	
	Serchhip	District AH & Veterinary Office	1	-	-	5	5	
6		District Veterinary Hospital	-	1	-	-	-	
		Veterinary Dispensary: Chhingchhip, N Vanlaiphai, Thenzawl	-	3	-	-	-	
	Sub-Total (6)		1	4	0	5	5	

SI No	District	Name of Establishment	300 litre capacity deep freezer	253 litres capacity refrigerator double door	215 litres capacity refrigerator single door	1.4 lires capacity vaccine carrier (medium size)	0.9 litres capacity vaccine carrier (small size)	Remarks
7	Lawngtlai	District AH & Veterinary Office	1	-	-	5	5	
		District Veterinary Hospital	-	1	-	-	-	
		Veterinary Dispensary, Sangau	-	1	-	-	-	
		RAHC: Bungtlang S, Vathuampui	-	-	2	-	-	
	Sub-Total (7)		1	2	2	5	5	
	Mamit	District AH & Veterinary Office	1	-	-	5	5	
8		District Veterinary Hospital	-	1	-	-	-	
		Veterinary Dispensary: W Phaileng, Zawlnuam	-	2	-	-	-	
	Sub-Total (8)		1	3	0	5	5	
GRAND TOTAL			7	36	52	58	63	

