



सत्यमेव जयते

Handbook *for* National Level Monitors



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भारत सरकार
GOVERNMENT OF INDIA

मत्स्यपालन, पशुपालन और डेयरी मंत्रालय

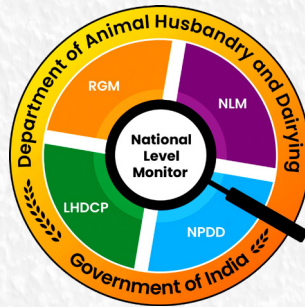
MINISTRY OF FISHERIES ANIMAL HUSBANDRY & DAIRYING
DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING





GOVERNMENT OF INDIA

Handbook *for* NATIONAL LEVEL MONITORS



GOVERNMENT OF INDIA
MINISTRY OF FISHERIES ANIMAL HUSBANDRY, DAIRYING
DEPARTMENT OF ANIMAL HUSBANDRY & DAIRYING
(ANIMAL HUSBANDRY STATISTICS DIVISION)

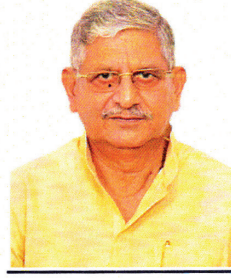


राजीव रंजन सिंह उर्फ ललन सिंह
RAJIV RANJAN SINGH ALIAS LALAN SINGH



पंचायती राज मंत्री
एवं मत्स्यपालन, पशुपालन एवं डेयरी मंत्री
भारत सरकार
Minister of Panchayati Raj and
Minister of Fisheries, Animal Husbandry and Dairying
Government of India

DO. No. 30730/MIN PR&FAHD/20.24



Message

The livestock sector serves as a critical pillar of India's rural economy, directly supporting millions of livelihoods and contributing significantly to our nation's food security and economic growth. It's development is crucial not only for the prosperity of our farmers but also for the overall welfare of the nation. Recognizing this, the Government of India, through the Department of Animal Husbandry and Dairying, has implemented several forward-thinking schemes to enhance livestock productivity, safeguard animal health, and promote sustainable practices in dairy and livestock management. Rashtriya Gokul Mission (RGM), National Livestock Mission (NLM), National Programme for Dairy Development (NPDD) and Livestock Health and Disease Control Programme (LHDCP) are some such schemes.

In order to ensure the successful implementation and monitoring of these initiatives, we have introduced the National Level Monitors (NLM), which are independent monitors. This independent monitoring framework of NLM for the schemes of RGM, NLM, NPDD and LHDCP will ensure that all programs are evaluated thoroughly, and the benefits are reaching the intended beneficiaries efficiently and equitably.

NLMs will provide an unbiased assessment of the progress on the ground, ensuring that challenges are addressed promptly and that our collective efforts contribute to building a more resilient and sustainable livestock sector. This initiative is a reflection of our ongoing commitment to supporting farmers, improving indigenous breeds taking care of the disease control mechanisms, and securing the long-term growth of livestock farming across the country. This "Handbook for National Level Monitors" will help not only the NLMs but also will be a guidebook for stakeholders.

I encourage all stakeholders to utilize this handbook as a key resource to better understand and implement the various schemes, ensuring that together, we can maximize their impact and continue driving positive change within this vital sector.

(Rajiv Ranjan Singh)



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राज्य मंत्री
मत्स्यपालन, पशुपालन एवं डेयरी
एवं
पंचायती राज मंत्रालय
भारत सरकार



सत्यमेव जयते

Prof. S. P. Singh Baghel
Minister of State
Fisheries Animal Husbandry & Dairying
and
Ministry of Panchayati Raj
Government of India



MESSAGE

The livestock sector is an integral part of India's economy, particularly in rural regions. Livestock rearing has been a cornerstone of our society, providing a steady income for farmers and those who have dedicated themselves to livestock-related businesses. This sector is the source of nutritional products such as milk, eggs, and meat.

The Department of Animal Husbandry and Dairying, under the Government of India, has been implementing various schemes to enhance livestock productivity and ensure a disease-free sector through vaccination and medicine drives. These initiatives also focus on improving livestock breeds for economic benefits and providing subsidies to state governments, federations, FPOs, and entrepreneurs to attract their involvement in the sector. RGM, NLM, NPDD and LHDCP are some of the flagship schemes of this department.

In order to evaluate the effective implementation of these schemes, department has introduced National Level Monitors who are independent monitors, to evaluate these schemes at implementation stage. This '**Handbook for National Level Monitors**' will be the guide for NLMs and other stakeholders.

I am pleased to present this handbook, which compiles all the four schemes offered by the Department of Animal Husbandry and Dairying. This resource will be valuable for both internal and external stakeholders. I am confident that National Level Monitors, responsible for monitoring various schemes, will find it particularly useful.

I commend the efforts of the Animal Husbandry Statistics Division in preparing this comprehensive handbook.

(Prof. S. P. Singh Baghel)

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सत्यमेव जयते

भारत सरकार
मत्स्यपालन, पशुपालन एवं डेयरी मंत्रालय
पशुपालन एवं डेयरी विभाग
Government of India
Ministry of Fisheries, Animal Husbandry & Dairying
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Dated 3rd October 2024,

Message

The livestock sector is a cornerstone of India's agricultural economy, contributing immensely to rural livelihoods, nutrition security, and overall economic growth. In the past year alone, the livestock sector contributed little more than 30% to the country's Gross Value Added (GVA) of Agriculture and Allied Activities. This underscores its pivotal role in supporting millions of farmers and generating sustainable income across rural communities.

In 2023, India achieved impressive production figures in this sector, solidifying its position as a global leader. The country produced 230.58 million tonnes of milk, making it the largest milk producer in the world. Egg production stood at 138.38 billion numbers which is second in the world, while meat production reached 9.77 million tonnes which is fifth globally. These numbers reflect not just the strength of our livestock industry but also its critical role in supporting rural prosperity and food security.

To ensure the continued growth and success of this vital sector, the Ministry has introduced several beneficiary oriented schemes like RGM, NLM, LHDCP, NPDD, etc. While implementing these schemes, as an administrator, responsibility of evaluate the implementation is also lies on us. Accordingly, this scheme namely National Level Monitors (NLM) was introduced. This initiative brings an independent and objective layer of oversee to the department's programs, providing an on-ground, real-time assessment of our key schemes like the Rashtriya Gokul Mission, National Livestock Mission, Livestock Health & Disease Control Program, and National Program for Dairy Development.

I believe NLMs will serve as the eyes and ears of the department at the grassroots level, ensuring that all initiatives are implemented effectively, and the benefits reach to every intended farmer and livestock owner. By bridging the gap between policy and practice, the NLM scheme helps us monitor progress, address challenges swiftly, and ensure a tangible difference in effective implementation of the schemes.

This 'Handbook for National Level Monitors' will work as a guide to the NLMs and other stakeholders in the field. The effort of the Animal Husbandry Statistics Division to compile this handbook is also acknowledged.


(Alka Upadhyaya)

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PREFACE


Livestock are integral to agriculture in India, enhancing food security, providing employment, and contributing significantly to the Indian Economy, they also act as a financial safety net for rural households and play a crucial role in exports.

With a strong objective of strengthen Animal Husbandry sector in the country, the Department of Animal Husbandry and Dairying has been implementing schemes namely (i) National Livestock Mission; (ii) Rashtriya Gokul Mission (RGM); (iii) National Programme for Dairy Development and (iv) Livestock Health & Disease Control Program (LH&DCP) etc.. It is needless to state that for rigorous implementation of a scheme the monitoring of its height and width is also equally important. So, despite scheme inbuilt comprehensive efforts to monitoring these, a persistent need for independent, on-ground oversight emerged. Challenges such as ensuring uniform implementation across states and providing timely technical support to implementing agencies necessitated a more granular approach. Recognizing these gaps, the Department has established the National Level Monitor (NLM) scheme to ensure an independent outlook on the programs reach at the point of intended beneficiaries effectively and equitably.

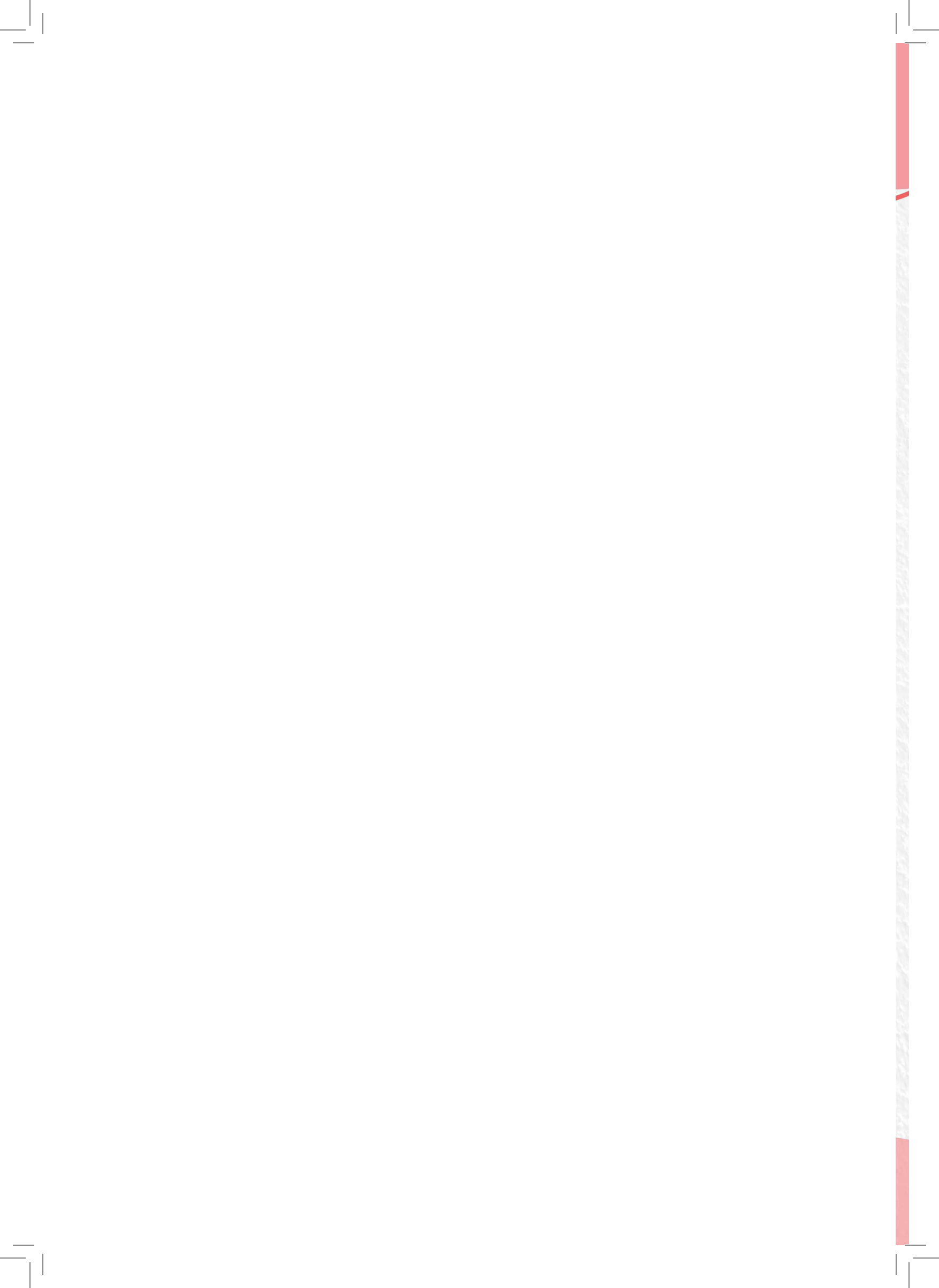
In order to monitor the scheme digitally, a comprehensive web application has been developed where all the stakeholders; Implementing Agencies, Programme Divisions, National Level Monitors and administrator will be in a common platform for sharing their information. The web-app will also help the monitor to capture the information through their mobile phone at the point of scheme implementation and for validation, cross check etc. further facilitating quick process of their information to generate report.

The '**Handbook for National Level Monitors**' is a document encompassing the guidelines of all four schemes, guidelines & terms of reference for NLMs. This Handbook is though basically meant for NLMs, will also be a guidance for other stakeholders involved in this exercise.

I wish to place on record my appreciation to the team of officers of Animal Husbandry Statistics Division, specially Shri V P Singh, Director, Sh. Chet Ram Meena, Deputy Director and Shri Mukesh Dutt Sharma, Assistant Director for their active involvement in this entire process.


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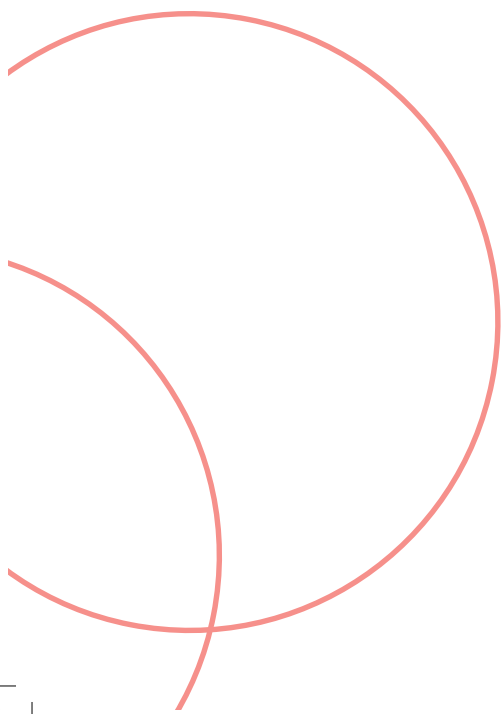
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Introduction

Evidence-based policy making should be integral to the overall governance structure in New India. To achieve this, it is important to be able to track performance, determine outcomes to understand how well a scheme is performing, and to help diagnose reasons for poor performance and generate recommendations for course corrections. With this objective of actively monitor and evaluate the implementation of schemes, programs and initiatives of the Department of Animal Husbandry & Dairying to strengthen their implementation and scope of delivery on an ongoing basis, the scheme of National Level Monitors is introduced.

The Department of Animal Husbandry and Dairying has been implementing various schemes like (i) National Livestock Mission; (ii) Rashtriya Gokul Mission (RGM); (iii) National Programme for Dairy Development, (iv) Livestock Health & Disease Control Program (LH&DCP) etc. to strengthen Animal Husbandry sector in the country. Despite scheme inbuilt comprehensive efforts to monitoring these, a persistent need for independent, on-ground oversight emerged. Challenges such as ensuring uniform implementation across states, providing timely technical support to implementing agencies etc. are necessitated for a more granular approach. Recognizing these gaps, the Department has established the scheme of National Level Monitors. Undoubtedly, the Department has a robust monitoring and evaluation framework in place, which includes regular monthly & quarterly progress reports, a dedicated management information system, and periodic review meetings etc.. Still this scheme has been introduced for an unbiased and objective monitoring system that would offer direct, regular assessment of program performance at the state & district level.

The schemes being monitored under National Level Monitors are Rashtriya Gokul Mission, National Livestock Mission, Livestock Health & Disease Control Program, and National Program for Dairy Development. Retired Eminent officials having in-depth insights into the programs' goals, implementation strategies and challenges will be the monitors for this purpose.

The Rashtriya Gokul Mission (RGM) is significant initiative and an ambitious program focused on the improvement of indigenous cattle breeds through advanced technologies like artificial insemination. This mission is central to department's vision of increasing milk production and ensuring the conservation of valuable indigenous breeds, thereby contributing to the overall economic upliftment of farmers involved in dairy farming.

The National Livestock Mission (NLM) is another key initiative that emphasizes sustainable development of the livestock sector. It aims to enhance the productivity of livestock by providing better nutritional feed, improving breeding practices, and ensuring efficient management of livestock resources. The

Introduction



Mission has three Sub-Missions viz. (i) Breed improvement of Livestock and Poultry (ii) Feed & Fodder and (iii) Innovation and Extension. The mission has 10 activities and target towards entrepreneurship development, feed and fodder development, research and innovation, livestock insurance. The mission also focuses on creating livelihood opportunities for small and marginal farmers, particularly in the areas of poultry, piggery, and goat farming.

To ensure the health and well-being of livestock, the Livestock Health & Disease Control Program (LHDCP) has been implemented. This program aims to control and eradicate major livestock diseases, thereby improving the overall health of the national herd. The major activities supported are vaccination against Foot and Mouth Disease (FMD), Brucellosis, Peste des Petits Ruminants (PPR) and Classical Swine Fever (CSF), Assistance to States for Control of Animal Disease (ASCAD) for control of state prioritized economically important exotic, emergent and zoonotic animal diseases. Additionally, financial assistance is provided towards procurement & customization of Mobile Veterinary Units (MVUs) for delivery of veterinary healthcare services at farmers' doorsteps which include disease diagnosis, treatment, vaccination, minor surgical interventions, audio-visual aids and extension services. Through regular vaccination drives, disease surveillance, and veterinary services, the LHDCP is crucial in maintaining the health of livestock, which in turn supports the productivity and income of farmers.

In order to capture the monitoring related information from the field, a digital application has been developed to capture the information from the field, directly into the mobile application, reducing the time taken for reporting and improving process efficiency.

Thus the NLMs will be the eyes and ears of the department on the ground, and their role is paramount in ensuring that the benefits of the department's schemes reach the intended beneficiaries.



Introduction

Terms of Reference (ToR)



1

Terms of Reference (TOR)

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Terms of Reference for Appointment as National Level Monitors

1. Introduction

Livestock is an important sub-sector of Indian agricultural economy and plays a multifaceted role in providing livelihood support to the rural population. Livestock sector apart from contributing to national economy in general and to agricultural economy in particular also provides employment generation opportunities, asset creation, coping mechanism against crop failure and social and financial security.

The contribution of livestock sector in agriculture in terms of output, has increased from 24.38% (2014-2015) to 30.19% (2021-22). The Livestock sector has been growing at a compounded annual growth rate (CAGR) of 13.36% (at current prices) from 2014-15 to 2021-22. This CAGR is comparable to the highest growing sector. Livestock sector contributed 5.73 per cent of total GVA in 2021-22 (at current prices). Development of livestock sector has led to improvement in per capita availability of milk, eggs and meat. Value of output of livestock sector is 15.63 lakh crore at current price during 2021-22 (as per National Account Statistics 2023). Value of output of milk is more than Rs.9.95 lakh crore which is the highest of the agriculture produce and even more than the combined value of two major cereal crops of paddy and wheat.

The Livestock sector needs further strengthening and value addition in terms of new technologies, breeding programs, disease control & eradication programs, establishing dairy & meat processing infrastructures, human resource development etc.

To address these challenges the Department of Animal Husbandry & Dairying, Government of India has launched several schemes outreaching to States and UTs in the country. The schemes are operated in a time bound manner and the outcome is periodically reviewed for effective implementation. Schemes presently under way in the Department are : (i) National Livestock Mission (NLM); (ii) Rashtriya Gokul Mission (RGM); (iii) National Programme for Dairy Development and (iv) Livestock Health & Disease Control program (LH&DCP).

The responsibility to conduct the Quality Monitoring – National Level Monitors has been assigned to Animal Husbandry Statistics (AHS) division of the Department of Animal Husbandry and Dairying.

2. Present Monitoring Mechanism

The Department of Animal Husbandry and Dairying has very comprehensive monitoring evaluation system of its aforementioned schemes through monthly progress reports, quarterly progress reports yearly progress report, management information system, regional review meetings, video conferencing session with the participating States. Department engaged PMA to support implementation of the schemes and monitoring of the projects being implemented throughout the country under various schemes. Department also undertake third party mid-term evaluation of the project last evaluation of schemes was conducted during 2018-19 by an agency identified by NITI Aayog.

However, there is need for independent monitoring of the scheme at the State level and to remove technical backstopping faced by implementing agencies in implementation of the schemes of the

Department. In view of this it is proposed that system of National Level Monitors to be established to achieve the purpose of unbiased and objective monitoring of its schemes in a systematic and regular manner.

3. Proposed Monitoring by National Level Monitors

3.1 It is proposed to undertake monitoring of the schemes being implemented by Department of Animal Husbandry & Dairying, Ministry of Fisheries, Animal Husbandry & Dairying

3.2 Regular Monitoring of major Schemes of Department of Animal Husbandry & Dairying:

The NLMs are proposed to be deputed for regular monitoring to monitor and report on various aspects of implementation of the Schemes being implemented by the Department of Animal Husbandry and Dairying namely (i) National Livestock Mission (NLM); (ii) Rashtriya Gokul Mission (RGM); (iii) National Programme for Dairy Development and (iv) Livestock Health & Disease Control program (LH&DCP). It is proposed to depute National Level Monitors in two phases about half of the States is proposed to be covered in each phase. Each NLM is proposed to visit 2 to 3 States and in every allotted State NLM is proposed to visit 4 to 5 districts. NLM are also proposed to visit 5 villages per district spread over pre-specified villages. The NLMs are proposed to interact with the beneficiaries in order to find out impact of the scheme at grass root level. NLMs are proposed to visit important infrastructure being created/ strengthened under the various scheme. The objectives of this monitoring are to ascertain:

- i. Whether the programmes of the DAHD are being implemented in accordance with the guidelines prescribed by the DAHD.
- ii. Whether the prescribed implementation processes are being followed.
- iii. Whether the assets created are of the prescribed quality and useful to the community.
- iv. The views of the villagers on the programmes and their suggestions for improvement.
- v. Whether the selection of beneficiaries under the programme has been transparent, unbiased and fair.
- vi. whether incentives to paravets/technicians/ farmers have been distributed as envisaged under the scheme
- vii. Whether data generated on vaccination, disease monitoring, artificial insemination has been uploaded on NDLM on real time basis.

3.3 Special Monitoring of Individual Schemes:

In case of special monitoring National Level Monitors proposed to be deputed to cover a particular scheme or some specific aspects of a particular scheme only and report on the issues/processes in detail. Limited number of Special Monitoring rounds re proposed to be conducted every year for in-depth coverage or certain specific features of a programme. These visits will be undertaken based on the requirements suggested by the programme divisions and approved by the Secretary.

3.4 Complaints/Enquiries:

In case of complaints of serious nature from people's representatives, farmers etc. regarding misutilization of funds, irregularities, etc., NLMs are proposed to be deputed to verify facts or for a preliminary enquiry with the approval of Secretary. The finding of the NLMs are proposed to be uploaded in the website.

3.5 Coverage of Department of Animal Husbandry and Dairying Schemes

National Level Monitors proposed to cover the following programmes/ schemes of the Department of Animal Husbandry & Dairying Ministry of Fisheries Animal Husbandry and Dairying:

- i. National Livestock Mission (NLM);
- ii. Rashtriya Gokul Mission (RGM);
- iii. National Programme for Dairy Development and
- iv. Livestock Health & Disease Control program (LH&DCP)
- v. Any other programme of the government, which may be specified from
- vi. time to time.

4. Empanelment of NLMs

A system of mix of Institutional and Individual NLM will be adopted by the Department.

4.1 Institutional NLMs

The institutes of National Importance are proposed to be identified through a transparent process of open advertisement/RFP. Such institutes have minimum of 5 years' experience in Animal Husbandry Sector including monitoring and evaluation of schemes implemented in livestock sector. Efforts will be made to select top institution of the country such as IRMA, IIM, ICAR, MANAGE, NABCONS, NDDDB etc

The empanelment of the Institutional NLM will be normally for 3 years which may be renewed further subject to their performances. There will be an annual review of performance of an Institute and the NLM will be removed/ delisted due to unsatisfactory performance, etc. at any time by the DAHD.

4.2 Individual NLM

4.2.1 Individual NLMs will be selected from retired Civil/ Defence Services Officers, Academia of following categories:

- i. Retired Central/State Government Officers including IT professionals and Management Experts of the level of Deputy Secretary and above to the Government of India
- ii. Retired officers of the rank of Deputy Secretary and above in the offices of AGs and the Comptroller and Auditor General of India
- iii. Ex-service officers from the Armed Forces of the rank of Lt. Colonel and above;
- iv. Retired officers of Para Military Forces having equivalent rank to Lt Colonel or above in the Armed Forces;
- v. Retired Engineers of the rank of Superintendent Engineer and above in Central/State Government
- vi. Retired professors of any recognized Veterinary Science University / Research Institute / scientific organization and
- vii. Retired PSU/PSB officers of the rank of Deputy General Manager and above.

4.2.2 Selection of such NLMs is proposed to be made through open advertisement. An individual upto the age of 65 years as on 1st April of the year of empanelment will be considered.

4.2.3 Experience in the field of Monitoring Evaluation work, including Animal Husbandry Sector will be given weightage for empanelment.

4.4 Once empanelled, the NLM would remain on the panel subject to annual review. An NLM may, however, be removed/ delisted due to unsatisfactory performance, etc. at any time by the DAHD. Fresh empanelment would be done to make up for the NLMs removed/delisted as and when required.

4.5 A Screening committee will select the NLMs from among those who have responded to the advertisement.

4.6 Credentials of NLMs, verification of antecedents, etc. recommended by search committee will be checked up with the concerned State government before final empanelment.

5. Orientation and Training

5.1 The DAHD will provide proper orientation and training to NLMs to make them well-versed with the Guidelines of Programmes and processes involved.

5.2 Scheme specific modules for this purpose is proposed to be developed which would also be regularly updated. A special module on Management Information Systems of all of the DAHD will also be developed.

5.3 The induction training will be organized with the assistance of CEAH.

5.4 Whenever a new scheme is introduced special training will be arranged for the NLMs before taking up actual monitoring work by the DAHD.

5.5 Post-training assessment will be done to assess the effectiveness and impact of the training. The findings of this assessment would be used to design and improve the training modules for future by CEAH.

5.6 Regular orientation workshops will be organized every year, at national or regional levels so as to keep the NLMs apprised of the latest changes and trends in the programmes. The NLMs will be kept updated through E-Mail/ web-site of the DAHD on relevant instructions, circulars and any other important information.

5.7 The State Government Nodal officers will also be invited to participate in the training sessions/ workshops and encourage to interact with the NLMs.

6. Responsibility of NLMs

6.1 The NLMs are the third party independent monitors for the various programmes of DAHD. The personnel engaged by the institutions have to be experts / professionals in the field of Animal Husbandry and Livestock sector.

6.2 The NLMs are required to visit the districts, ascertain the implementation of the programmes vis-a-vis the guidelines, interact with officials, verify the assets created and interview villagers and submit their reports within a time frame of two months. However specific dates/timelines will be informed to the NLMs at the time of allotment of States to them.

6.3 The NLM will chalk out their final programme (dates / days of visits) in advance and inform the concerned State with copies endorsed to the Secretary in charge of Animal Husbandry Department of

the State and to the AHS Division in the DAHD at least one month before the actual date of the visit.

6.4 Before proceeding to the field, the NLMs should access the MPR / MIS system of all the schemes as they are actually functioning and gather relevant data.

6.5 The State / District veterinary officials may be apprised of the visit plan and requested to keep the required information ready at the District and at the sample villages to be covered by the NLM. At the completion of the visit there will be an Exit Meeting to discuss with the district officials on the provisional findings, areas of good performance and areas for improvement. NLMs shall record the views/feedback of the officials on their findings and also include them in the report.

6.6 The NLMs deputed to a State should also interact with the Secretary or Senior Officers in-charge of Animal Husbandry Department in the State to the extent possible.

6.7 NLMs will earmark one or two hours, preferably on each day when they are available in a State/district/block, to meet complainants/general public. The district Animal Husbandry Officer will publicize widely, in advance, the field visit programme of the NLMs, their place of stay, contact telephone number and earmarked time schedule to meet the visitors so that the general public interested in interacting with NLMs may do so and provide feed-back about the implementation of the Animal Husbandry Schemes in the State/district.

6.8 The visit may be planned keeping in view the quantum of work and the number of days for the visit will be decided accordingly. Generally, a regular monitoring visit to a States should be restricted to 10/12 days. For the Special Monitoring Visits and Enquiries, the number of days allowed will be communicated in advance based on the methodology and requirements of the assignment.

7. Deployment of NLMs

7.1 The NLMs will be deployed for regular monitoring twice in a year by the Department. In each phase around half of all the States will be covered so that all the States of the country are covered in a year.

7.2 The DAHDF will prepare a phase wise detailed schedule for deployment for regular monitoring and it would be circulated to them well in advance.

7.3 The NLMs may be deputed to visit the neighbouring States, but will not be deputed to their home State.

7.4 The NLMs will not be allotted States/districts visited by them during the previous years.

7.5 In case of Individual NLM, a team of two NLMs will be deployed to visit a State/district. For institutional NLM, institutes will be requested to send a team of two persons from their institute for monitoring. Department may depute an officer or depute additional NLM, if deemed necessary. NLM will submit duly signed monitoring report jointly to DAHD within 15 days of their completion of visit.

8. Methodology and Reporting

8.1 A set of guidelines and instructions will be provided to the NLMs at the time of deputing for an assignment. These would include details about the sample to be covered, methodology to be followed and instructions to fill the formats. Customized Check-list for inspection and the reporting format to be used by the NLMs will be provided.

8.2 Letter will be sent by the Divisional head of NLMs unit clearly mentioning the details of the visits of NLMs, in advance to the Principal Secretary/ Secretary of State Department of and so that concerned

State provide time to NLMs for pre & post visit briefing.

8.3 The visiting NLMs are required to submit a report to the Department of Animal Husbandry and Dairying, in the prescribed format within 15 days of completion of visit. The report should be concise with an executive summary of not more than 2-3 pages giving key findings and actionable points.

8.4 The detailed report should contain key issues related to the different components of the schemes of the Department of Animal Husbandry and Dairying such as:

- i. Reach of the programmes & its implementation
- ii. Financial management – release and flow of funds; utilization of funds
- iii. Technological issues, skill up-gradation & training
- iv. Quality of construction/ Equipments, operation & maintenance of assets
- v. Transparency in Implementation Process
- vi. Coverage and reach of the programmes in respect of SC/ST, Women and other marginalized sections of the society.
- vii. Reports generated and used by State officials from National Digital Livestock Mission.

8.5 In case of any serious irregularity observed by the NLM, complete information like name of asset/ details of equipments, address, time of the event and other necessary details along with the photographs etc. should be provided so as to enable necessarily follow up/corrective action.

8.6 The NLM will submit Report within 15 days of completion of visit and the submissions may be hard copy followed by e mail.

9. Follow-up Action:

9.1 All the actionable points contained in the NLM reports for a State will be collated and a single report with an executive summary of not more than 2-3 pages giving key findings and actionable points will be submitted so that follow up action can be taken up at the State and Government of India level. DAHD will obtain the Action Taken Reports thereafter from the States.

9.2 The Programme Divisions will take follow-up action on all NLM reports. The Programme Division concerned will put in place some mechanism to ensure that the States do take action promptly. If no satisfactory action is taken by the State for more than one full financial year, further release of funds to such State under the particular Scheme will be withheld.

9.3 The position of complaints and action taken will be considered by the concerned programme divisions while processing the files for release of funds.

9.4 DAHD will organize regular regional workshops with active participation of the Central Ministries and concerned State Governments officials in that region to discuss the findings of the NLM reports after each phase of visit.

9.5 Every NLM will present the observations of the visits in a formatted manner through a power point presentation in the workshop.

9.6 The AHS Division will coordinate the overall National Level Monitoring and shall act as a single point of contact for all stakeholders.

10. Role of State Government

10.1 The State Government Officials should ensure that the Director Animal Husbandry, Chief Executive Officer of State Livestock Development Board and District Veterinary Officer devote time to interact with the NLMs at the beginning as well as at the end of the visit.

10.2 The Reports of the NLM will be forwarded to the State Government/ State Department of Animal Husbandry so that they can look into the issues highlighted in the report and identify the actions to be taken. They should also take corrective actions, wherever required.

10.3 The reports of the NLM will also be discussed in a follow-up workshop where they can interact with the DAHD officials on the identified issues and action taken.

11. Performance and Appraisal of NLMs

11.1 The performance of each NLM, including Institutional NLMs, will be assessed annually and graded by the Assessment committee constituted by the programme division on prescribed parameters.

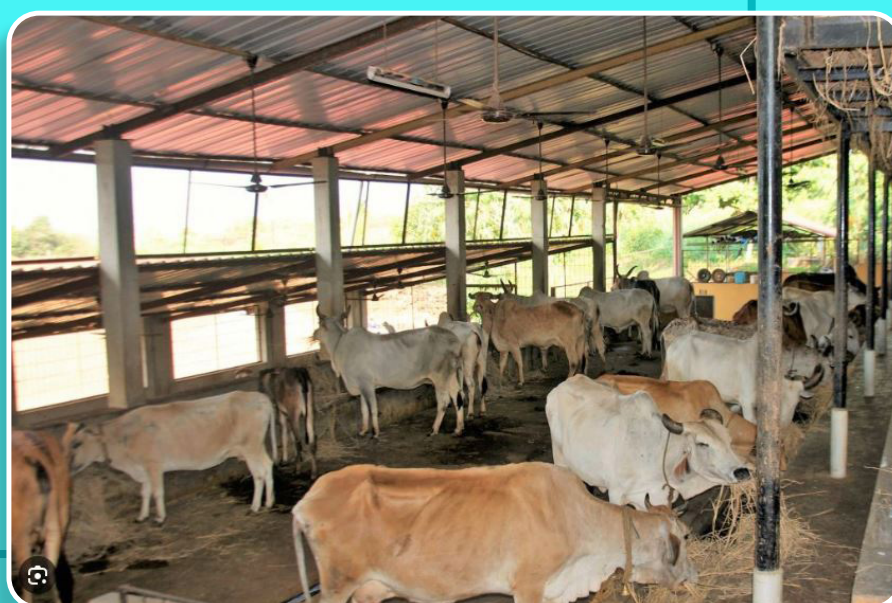
11.2 An undertaking will have to be obtained from the members of the Assessment Committee that they do not have any association with any empanelled NLM.

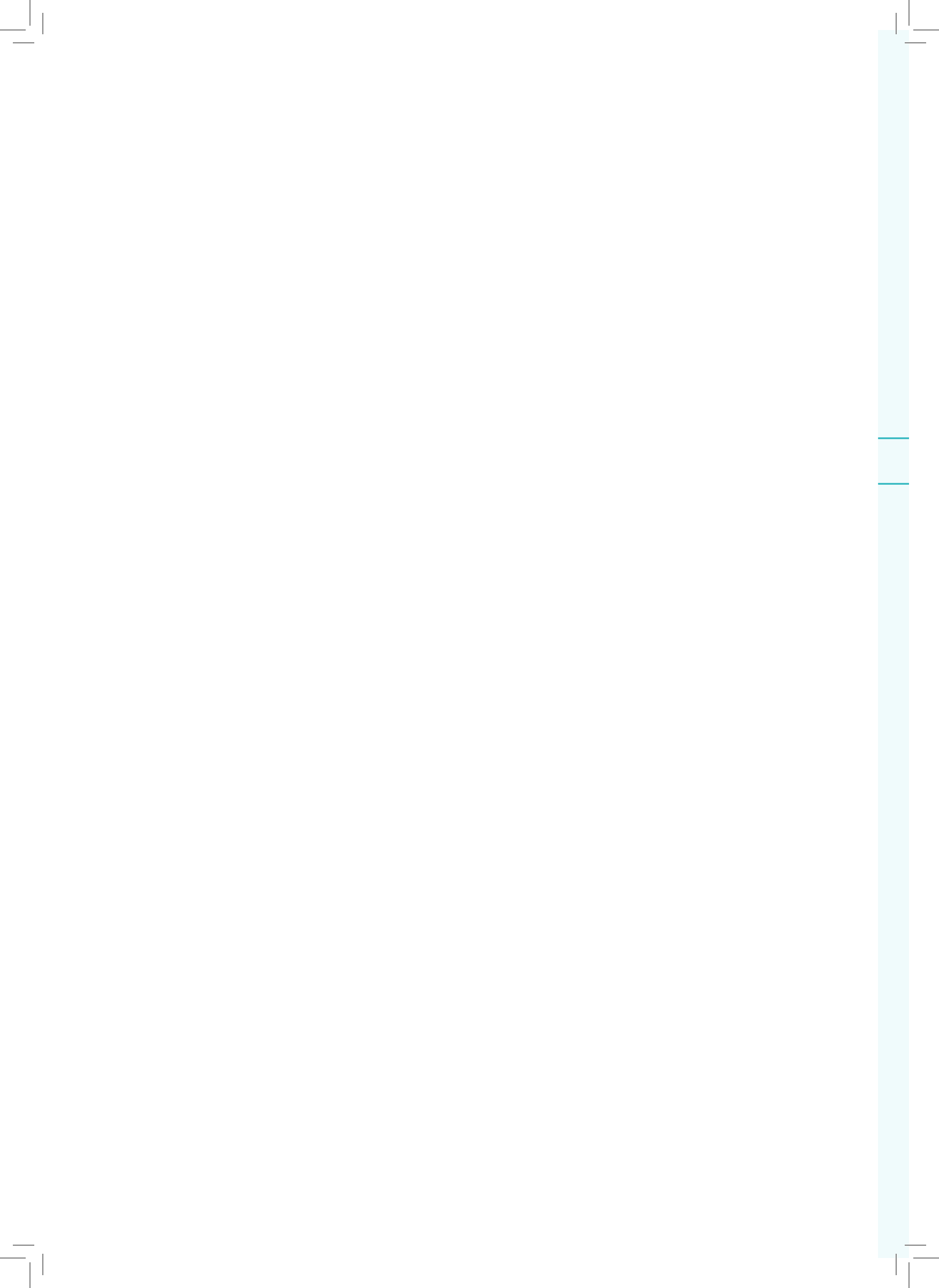
12. Remuneration to NLMs

12.1 Tours and Allowances: TA / DA to the NLMs shall be admissible for Non-Official members as per TA/DA rules mentioned in OM No. 19047/1/2016-E.IV dated 14.09.2017 issued by Department of Expenditure, Ministry of Finance, Government of India.

12.2 Honorarium/Sitting fee shall be paid to all the NLMs including individual NLMs of the Committee. DAHD shall decide upon the remuneration and other allowances based on provisions under OM No. 19047/10/2016-E.IV dated 12.04.2017 issued by Department of Expenditure, Ministry of Finance, Government of India. These may be reviewed by the Department from time to time.

Operational Guidelines For **Rashtriya Gokul Mission**





2

Operational Guidelines for Rashtriya Rokul Mission (2021-2026) Salient Features

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Operational Guidelines for Rashtriya Gokul Mission (2021-2026) Salient Features

1. Introduction

The Rashtriya Gokul Mission (RGM) is being implemented for development and conservation of indigenous bovine breeds since December 2014. Scheme is crucial for upliftment of rural poor as more than 80% low producing indigenous animals are with small and marginal farmers and landless labourers. The scheme is important in enhancing milk production and productivity of bovines to meet growing demand of milk and making dairying more remunerative to the rural farmers of the country. The scheme is leading to multiplication of elite animals of indigenous breeds and increased availability of indigenous stock. The scheme is proposed to be continued under umbrella scheme Rashtriya Pashudhan Vikas Yojna. The RGM will result in enhanced productivity and benefit of the programme, percolating to all cattle and buffaloes of India especially with small and marginal farmers. This programme will also benefit women in particular since over 70% of the work involved in livestock farming is undertaken by women.

2. Objectives

- a. To enhance productivity of bovines and increasing milk production in a sustainable manner using advance technologies
- b. To propagate use of high genetic merit bulls for breeding purposes.
- c. To enhance Artificial insemination coverage through strengthening breeding network and delivery of Artificial insemination services at farmers doorstep
- d. To promote indigenous cattle & buffalo rearing and conservation in a scientific and holistic manner.

3. Funding Pattern

All the components of Scheme will be implemented on 100% grant-in-aid basis except the components of: i) accelerated breed improvement programme under the component subsidy of Rs 5000 per IVF pregnancy will be made available to participating farmers as Golshare; ii) promoting sex sorted semen under the component subsidy upto 50% of the cost of sex sorted semen will be made available to participating farmers and iii) establishment of breed multiplication farm under the component subsidy upto 50% of the capital cost of the project will be made available to entrepreneur.

4. Duration of the Project:

4.1 Rashtriya Gokul Mission will be implemented throughout the country from 2021-2022 to 2025-26 on the funding pattern as stated above.

5. Scope and Area of Operation:

5.1 Area: Rashtriya Gokul Mission will be implemented throughout the country.

5.2 Scope: All Components related to genetic upgradation of bovine population as mentioned in the guidelines will be eligible for funding under RGM.

6. Implementing Agencies

6.1 Implementing Agencies (IAs)	State Livestock Development Boards# / State Milk Federations# / Central Frozen Semen Production and Training Institute, Central Cattle Breeding Farms, Central Herd Registration Scheme, National Dairy Development Board/Indian Council of Agricultural Research ICAR and its Institutes / Central Universities/ Government Veterinary Universities
6.2 Participating Agencies (PAs)	Other agencies having a role in Bovine Development like, Universities, Colleges, etc PAs will submit Projects to the concerned IA.

#State Government may decide on State implementing agency and participating agencies of the scheme.

7. Institutional Set-up for Implementation

7.1 Under Rashtriya Gokul Mission (RGM) funds will be released directly to Implementing Agencies (IAs).

7.2 All Implementing Agencies will implement PFMS for making expenditure under the scheme and implement EAT module of PFMS.

7.3 Implementing Agencies will submit utilization certificate as per format prescribed in GFR 2017 through the concerned State Government. UC shall be duly countersigned by the State Government. NDDB/ICAR Institutes shall submit UC as per the prescribed format at the end of the financial year. All the agencies will refund interest accrued out of the funds released by Government of India through NTRP portal of Bharat Kosh.

7.4 Participating Agencies (PAs) will submit proposal to IAs for assistance under the scheme. The IAs will channelize funds to the PAs for implementation of the project.

8. Fund Flow Mechanism under RGM

8.1 Implementing Agency (IA) of the Project:

- i. Funds will be released directly to IAs Bank Account registered with PFMS.
- ii. IAs shall open project wise bank account for effective monitoring of the project.
- iii. IAs shall map all the account of vendor on PFMS for making payment under the scheme.
- iv. IAs shall use EAT module of PFMS and update information on PFMS on daily basis.
- v. IAs shall not be allowed to divert funds to FD/Flexi Account/Multi option Deposit Account/Corporate Liquid Term Deposit Account
- vi. Interest earned shall be depicted separately on PFMS and remitted mandatorily after end of each of every financial year through NTRP portal of Bharat Kosh.
- vii. State share released by the State Government under the earlier components (sex sorted semen) shall be depicted on PFMS.
- viii. UTs without legislature shall work directly on PFMS.
- ix. IA shall submit Utilization certificate as per format after end of each of every financial year through the State Government. IAs such as NDDB, Central Universities, CCBFs, CFSP&TI and ICAR institutes shall submit UC directly to DAHD. Utilization Certificate shall be uploaded on PFMS and immediately.
- x. During the further release of funds balance amount of funds available in the account of IA will be considered.
- xi. No funds will be released to IA if UC is not uploaded on PFMS and utilization information is not

updated on EAT module of PFMS.

8.2 Participating Agency

- i. PA shall open zero balance account and same shall be linked with PFMS by IA.
- ii. IA shall transfer funds in the zero balance account maintained by PA.
- iii. PA shall map all the account of beneficiaries/vendor on PFMS for making payment under the scheme. No payment shall be made through DD/ Cheques
- iv. PA shall maintain saving bank account and not allowed to maintain current bank account.
- v. PA shall refund interest accrued out of the funds released to IA after end of each of every financial year.
- vi. PA shall not be allowed to divert funds to FD/Flexi Account/Multi option Deposit Account/Corporate Liquid Term Deposit Account
- vii. IAs shall monitor implementation of the project at the level of PA on monthly basis
- viii. PA shall use EAT module of PFMS during utilization of funds and update information on PFMS on daily basis.

9. Supplementation of Fund-Flow from Sources other than RGM

9.1 The IAs may augment fund flow from their own resources towards recurring and maintenance costs.

9.2 It is also expected that every effort at convergence would be made in the project formulation by the States utilizing sources such as RKVY and multidisciplinary schemes of Ministry of Rural Development, Department of Agriculture & Cooperation & Farmers Welfare, Department of Biotechnology etc.

10. Central Level Implementation Mechanism

10.1 There will be a Project Sanctioning Committee (PSC) / Project Steering Committee constituted by drawing experts from related field which will be chaired by the Secretary AHD. PSC will be responsible for approval of projects for funding under RGM scheme received from IAs. Projects will be appraised by DAHD officials before putting them to the PSC for approval.

Composition of the Committee is as under:

1	Secretary, DADF, Government of India	Chairperson
2	AS&FA, DADF, Govt. of India	Member
3	Animal Husbandry Commissioner	Member
4	Joint Secretary, CDD, DADF	Member
5	DDGICAR (AS) or his representative	Member
6	Executive Director, NDDB	Member
7	Joint Commissioner (Cattle)/Deputy Commissioner/ Asstt Commissioner	Member Secretary

PSC will be empowered to lay down and amend operational guidelines, other than those affecting financing pattern, approve Annual Action Plans and sanction release of funds to the IAs. The PSC would have powers to 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 PSC, component structure, cost of components and re-appropriation proposals. PSC will be fully empowered to make changes and delegate powers necessary for smooth implementation of the programme.

10.2 Central Monitoring Units (CMU): of experts already constituted by the Department for development Minimum of Standard Protocols (MSP) and Standard Operating Procedures and implementation of the MSP and SOPs in the country will continue its activities during RGM 2021-26. Evaluation of accreditation of breeding institutes such as semen stations, AI training Institutes, Bull Mother Farms, IVF labs will be undertaken by CMU in order to improve quality of breeding inputs available in the country.

10.3 Measures to Ensure Quality of Goods and Services: Standards and specifications in the form of MSPs/SOPs formulated by CMU shall be implemented in letter and spirit by IAs. Standards formulated by BIS for cryocontainers, castrators, AI consumables; equipments etc shall also be followed by IAs.

10.4 Project Management Agency (PMA): For implementation and monitoring of scheme a Project Management Agency (PMA) will be established. PMA will assist in implementation and monitor the project throughout the country. At the head quarter PMA will provide core staff for drawing state specific proposals and appraisal of subprojects received from the IAs. Management Information System (MIS) will be developed by PMA to obtain online progress reports from IAs of the scheme.

10.5 Call Centre: Close monitoring of the project will also be done through call centre and cost of the call centre will be borne from National Animal Disease Control Programme.

11. State Level Implementation Mechanism

11.1 State/UT Level RGM Review Committee meeting shall be held every month under the Principal Secretary of the State to review progress of physical financial and technical parameters. CEOs of LDB, Director (Animal Husbandry), representative of 1 semen station and breeding experts of State veterinary University will be its members. Joint Secretary, DAHD or his representative should attend the meeting once every quarter.

11.2 Annual Workshop of all stake holders will be organised by the participating State to review and monitor implementation of the scheme.

11.3 All State Implementation Agencies (IAs) will follow the State Procurement/purchase Procedures and Guidelines.

11.4 Audited Annual Progress Report in the prescribed format will be published by the IAs within the prescribed time frame and circulated to all concerned.

12. State Ranking

To enhance the competitive spirit of good performance among the States and Union Territories, it is proposed to conduct an annual State wise ranking exercise in implementation of Rashtriya Gokul Mission based on the following parameters: (i) Increase in AI coverage from existing AI coverage; (ii) % of targets achieved under implementation of Nationwide AI programme; (iii) % of targets achieved in establishment of MAITRIs; (iv) completion of projects sanctioned under the scheme and (v) feedback from farmers/beneficiaries of NAIP/ sexsorted semen/IVF technology. PMA will assist in development of further details for State wise ranking in implementation of Rashtriya Gokul Mission.

13. Social capital usage for implementation, extension and Monitoring

13.1 Panchayati Raj Institutions (PRIs) will be integrated for monitoring of the scheme at the village level specially NAIP, Sex Sorted semen, IVF technology, MAITRIs etc. List of farmers availed services under the scheme will also be made available to PRIs

13.2 Pashu Sakhis established under DAYNRLM will be used for conducting awareness campaign in the villages. Eligible Pashu Sakhis will also be given basic training in AI and established as MAITRIs. Pashu Sakhis will also be used in monitoring of activities under taken by AI technicians and services made available to farmers at village level.

13.3 ICAR Research Institutes will be integrated for undertaking research development activities required for implementation of the scheme.

13.4 Krishi Vigyan Kendra will be used as farmer's training school and demonstration centre.

13.5 The Government approved social media platforms will be used for overall publicity and dissemination of Departmental activities.

14. Components

The details of components of RGM along with their pattern of assistance are as under:

14.1 Availability of Highgenetic Merit Germplasm:

14.1.1 Bull Production Programme

14.1.1.1 Progeny Testing: Milk production is a sex limited trait therefore genetic potential of the bull is estimated by the performance of the daughters. The scientific breeding method for estimating predicted transmitting ability of bulls on daughters' performance is termed as progeny testing. Under the component organized progeny testing programme will be assisted for production of progeny tested bulls. Implementation of Progeny testing programme will be coordinated through NDDB and bulls produced under the programme will be distributed through bull distribution committee constituted by DAHD. Projects will be implemented through Minimum Standard Protocol and SOPs prescribed by DAHD. Detailed Guidelines are given **Annexure-I**

14.1.1.2 Pedigree selection: Under the programme, high genetic merit bulls are selected on the basis of pedigree details and performance of dam, sire and other ancestors in the pedigree. The pedigree selection programme will be continued under Rashtriya Gokul Mission for production of high genetic merit bulls in order to meet requirement of bulls of different breeds at semen stations. The establishment of Central herd Registration Scheme will be deployed for monitoring and implementation of pedigree selection programme. Detailed guidelines given at **Annexure-II**.

14.1.1.3 Genomic Selection: Multi-breed genomic chip developed after combining efforts made by agencies such as National Bureau of Animal Genetic Resources (NBAGR), National Dairy Development Board (NDDB), and National Institute of Animal Biotechnology (NIAB) will be used for initial selection of bulls to be put under PT programme and selection of high genetic bulls on the basis of genomics and pedigree information. For development and validation of genomic chip NDDB and NBAGR will be assisted. Provision of funds under the component will also be for committed liabilities of ongoing National Bovine Genomic Centre for Indigenous Breeds (NBGCIB) project. It will be mandatory for all the semen stations to take up genomic testing of all the bulls available to semen station.

14.1.1.4 Import of Germplasm: Import of germplasm of indigenous and exotic breeds of very high genetic merit will be taken up to make replacement of low genetic merit bulls available at semen stations. During initial years import of the germplasm in the form of bulls will be taken up and imported bulls will be made available to semen stations under the control of GoI, State Government, NDDB and

Dairy Cooperatives. It is proposed to import unsexed embryos with high standards and specifications of indigenous /exotic breeds to meet long term requirement of bulls. Imported embryos would be made available to identified IVF centers for production of bulls (male calves). Male calves born through imported embryos will be made available to semen stations as mentioned above and female calves born under the programme will be made available to IVF centres for use as donor mothers. High genetic merit semen of breeds of Indian origin and exotic breeds will be imported to meet requirement of bulls and to create pool of high genetic merit bull mothers for use in IVF programmes. Germplasm in all the form semen, embryos and bull will be imported through NDDDB. Funds under the component will be released directly NDDDB for implementation of the project.

14.1.2 Support to semen stations

14.1.2.1 Strengthening of existing semen stations: Support under the component will be limited to semen stations under the control of State Governments, Livestock Development Boards, Dairy Cooperatives/ Milk Federations and NDDDB. Under the component funds will be made available for strengthening infrastructure such as construction of bull sheds/bull pen, semen collection arena, semen processing laboratory, strengthening of bio-security etc and for equipments and other related items. It will be mandatory for all semen stations to use SSMS and Information Network for Semen Production and Resource Management (INSPRM). NDDDB will assist semen stations in preparation of the project on the basis of infrastructure available and semen doses required for implementation of RGM. Detailed guidelines are given at **Annexure-III**. All the semen stations in the country will be evaluated and accredited by Central Monitoring Unit. All the semen stations will follow MSP for semen production and guidelines issued by Government of India from time to time. Non accredited semen stations will not be allowed to sale semen doses for use in breeding programme in the country.

14.1.3 Implementation of IVF technology:

14.1.3.1 IVF labs: Committed liabilities of 30 IVF labs and centre of excellence sanctioned under RGM will be completed during RGM 21-26. All the labs practicing ETT will be converted into IVF lab by 2021-22. All labs will be accredited and evaluated by Central Monitoring Unit.

14.1.3.2 Implementation of In Vitro Embryo Production Technology: IVF technology will be promoted at 7 CCBF for production of high genetic merit bulls. Unsexed semen will be used to produce bulls from donors above MSP. Private agency will be identified to produce HGM bulls at CCBFs. Male calves produced using IVF technology from the donors above MSP available with farmers meeting disease testing protocols will also be procured for use in semen production. HGM bulls produced will be distributed through bull distribution committee as stated above. Other labs sanctioned under the RGM will be allowed to develop revenue sharing model for getting assured pregnancy through IVF technology.

14.1.3.3 Implementation of IVF technology for getting assured pregnancy: For rapid genetic upgradation in the country IVF technology will be used for getting assured pregnancy in the recipients maintained by farmers interested in taking technology for production of elite animals. Component will be implemented through NDDDB throughout the country. Subsidy will be made available to participating farmers and calves produced under the programme will be subjected to parentage testing. Component will be implemented through NDDDB. Detailed guidelines for implementation of the project is given at **Annexure-IV**

14.1.4 Breed Multiplication Farms:

Breed Multiplication Farms Entrepreneurship model will be developed for establishment of breed multiplication farms for making available high genetic merit heifers (HGM) to farmers to fulfill

the need of general shortage of such animals. It is proposed to make available 50% capital subsidy to interested entrepreneur for construction of cattle sheds, equipment, procurement of elite bull mothers etc. The entrepreneur will establish breed multiplication farm (BMF) and produce elite heifers using sex sorted semen or IVF technology. Disease free heifers produced at the BMF will be sold to interested farmers. HGM bulls born at BMF will be procured by semen stations for semen production. Breed Multiplication Farm will also act as the training centre to conduct training for farmers and entrepreneurs. For establishment of BMF entrepreneur will obtain loan from financial institutions and subsidy will be routed through NDDB. Component will be implemented through NDDB as Implementing Agency.

Detailed guidelines are at ANNEXURE-V

14.2 Extension of AI coverage

14.2.1 Establishment of Multi-Purpose AI technicians in Rural India (MAITRIs): Against the requirement of 2,02,469 AI technicians 1,16,586 AI technicians are available in the country. Thus additional 90,958 AI technicians will be required for extension of AI coverage from 30% to 70%. Under the scheme it is proposed to establish 40,000 MAITRI centers over five year period. Funds under the component would be made available for: i) procurement of equipment and ii) training of MAITRIs. Efforts will be made to augment resources for training of MAITRIs from PMKVY/DDKV scheme and using existing veterinary colleges for imparting quality training to MAITRIs. Detailed Guidelines are given at **Annexure- VI**.

14.2.2 Nationwide AI programme: Under the component it is proposed to cover 30 million animals annually through artificial insemination. This will lead to increase AI coverage from present level of 30% to 70% of the breedable bovine females. Besides, it is mandatory that all animals covered under the programme will be identified using Pashu Aadhaar. Quality AI services will be delivered by MAITRIs/ Government AI technicians/private/NGO at farmers' doorstep. In the proposed programme only use of high genetic merit bull semen will be permitted. Under the programme AI services will be delivered at farmers' doorstep free of cost. Incentive will also be made available to MAITRIs/private AI technicians for performing AI using HGM bull semen and after that incentive will be made available on calf born basis. Additional incentive on the basis of the conception rate will also be made available to all AI technicians. Provision of procurement of semen doses and awareness programme is also available under the project. Incentive for tagging of the animals will be available to AI technicians from National Animal Disease Control Programme (NADCP) scheme. Detailed Guidelines are at **Annexure- VII**.

14.2.3 **Using sex sorted semen for getting assured pregnancy:** With mechanisation of Agriculture, utility of male bovines have been reduced. Farmers are not willing to maintain Bullocks for agriculture or any other draft work. Hence, male calves born at farmer house have become a liability. Farmers often let the male calves loose which are resulting into increase in stray animal population. Only female calves can be produced (with more than 90% accuracy) by use of latest technology like Sex Sorted Semen in AI program. Extensive use would also increase the number of female animals thereby increasing income of farmers through sale of female or by sale of milk.

Sex sorted semen doses will be used for getting 51 lakh assured pregnancies, leading to birth of 45 lakh female calves. All the animals covered under the programmes will be registered and their data uploaded on Information Network for Animal Health and Productivity (INAPH) data base. Female calves born under the programme will also be registered using Pashu Aadhar and their data uploaded on INAPH database. Sex sorted semen for assured pregnancy will be used in normal cyclic animals in 1st to 3rd lactation. Concerned Milk Union/State Animal Husbandry Department will be requested to take responsibility to provide veterinary aid to the calves born under the programme. Subsidy will be made

available under the programme to farmers for getting assured pregnancy and from 3rd year onward subsidy will be reduced as cost of sex sorted semen will be reduced substantially and balance amount of fund for getting assured pregnancy will be met by the participating farmer. **Detailed guidelines are at Annexure-VIII**

14.2.4 Implementation of National Digital Livestock Mission (Livestack)

Under National Livestock Digital Mission (Livestack), all livestock related activities and transactions including health and breeding services, sale and purchase, etc shall take place in purely digital mode on the basis of the unique animal ID Pashu Aadhaar which is presently being assigned through ear tagging to all large and small livestock across the country. A complete open source tech stack will enable inputs of all reporting, including disease and outbreak reporting, by veterinarians and field level workers and service providers through a user end digital interface. Farmers can access their own data, make service requests, and access the latest technical and business information through an updated version of the farmer facing app e-GOPALA or through a connected national level four digit call centre number. Since all farmers would thus be linked, direct benefit transfers from all Central or State level schemes, and e-vouchers giving the power to choose a service provider, would also be possible through this mechanism. Through open APIs, third party entities such as dairy processors, other private companies, app developers, and researchers can access the database through established data sharing standards, and product traceability regulations designed and enforced on the basis of this database. Thus, not only the ease of working and accountability of service providers is increased manifold, and farmers are fully empowered, but also the entire economy around livestock is multiplied through this data. Finally, these datasets would be of high enough quality to permit use of Artificial Intelligence and Machine Learning to predict outbreaks and productivity issues well in advance so that corrective steps can be taken well in time. All these initiatives would make the livestock sector world class and enable high volumes of exports, which are presently negligible compared to the potential. National Digital Livestock Mission will be implemented through National Dairy Development Board.

14.3 Development and Conservation of indigenous Breeds

14.3.1 Assistance to Gaushalas, Gosadans and Pinjarapoles: Under the component provision of funds will be made available to those Gaushalas, Gosadans and Pinjarapoles which are maintaining elite animals of indigenous breeds. The institutes identified will be assisted for strengthening of cattle sheds, creation of drinking water facility, artificial insemination, bio-security etc. Detailed guidelines will be issued separately.

14.3.2 Administrative expenditure/ operation of Rashtriya Kamdhenu Aayog: As per the cabinet approval RKA has been constituted by the Department vide order No. 3-260/2019-AHT (RGM) dated 21.02.2019. As mentioned in the Cabinet Note administrative expenses on operation of Rashtriya Kamdhenu Aayog will be met from Rashtriya Gokul Mission. Allocation of Rs 1 crore per annum will be made available for meeting operation cost of Rashtriya Kamdhenu Aayog.

14.4 Skill Development:

14.4.1 Assistance will be made available for training of professionals in IVF technology, other advanced reproductive techniques and training of AI technicians/ professionals in latest development in frozen semen technology. The IVF training will be conducted at the training institutes recognized by the DAHD for this purpose. Skill of the trainees will be assessed after completion of training.

14.5 Farmers Awareness:

14.5.1 For creation of awareness among the farmers, funds will be made available under the scheme for organising farmers training programme, award to farmers, best AI technicians, dairy cooperatives, fertility camps, publication of leaflets and pamphlets, milk yield competitions, calf rallies, workshops and seminars, development of audiovideo aids, wall paintings etc. All other extension activities required for effective implementation of the project will be supported under the component.

14.6 Other Activities related to cattle and buffalo Development

14.6.1 Research Development and Innovation in Bovine Breeding: Provision under the component is proposed for assisting institutes and organizations undertaking research in the areas of bovine breeding including innovators and start ups so that new innovation and research come up in the sector of bovine breeding. This will accelerate the growth of the sector by many folds.

14.6.2 Any other activity considered to be important to taken up under the project will be allowed including creation of new infrastructure for bovine breeding.

15. Project Preparation and Submission of Proposal

15.1 The IA's will formulate a single comprehensive proposal and avoid duplication/overlap of activities.

State Implementing Agency will submit proposal to DAHD through State Government.

Implementation of Progeny Testing Programme

1. Introduction

One of the key factors affecting productivity is the genetic ability of an animal for milk production, which is an inherited character, while others provide an enabling environment. The breeding bull contributes significantly in enhancing the genetic potential of its progenies for economically important traits like milk production, fat, SNF, protein, fertility, body conformation etc. Therefore, building an infrastructure for evaluation and production of breeding bulls with high genetic potential for milk production and other important traits and an infrastructure to transmit their genetic potential to maximum number of progenies is very important in any animal breeding programme. Progeny Testing is a method for accurately evaluating and selecting top bulls and using them to produce future bulls. This document describes the Standard Operating Procedures (SOP) and minimum standards for implementing a progeny testing programme both for cattle and buffaloes in the field for evaluation and selection of high quality bulls and for production of young bulls by inseminating best performing elite females using semen of top ranked progeny tested bulls.

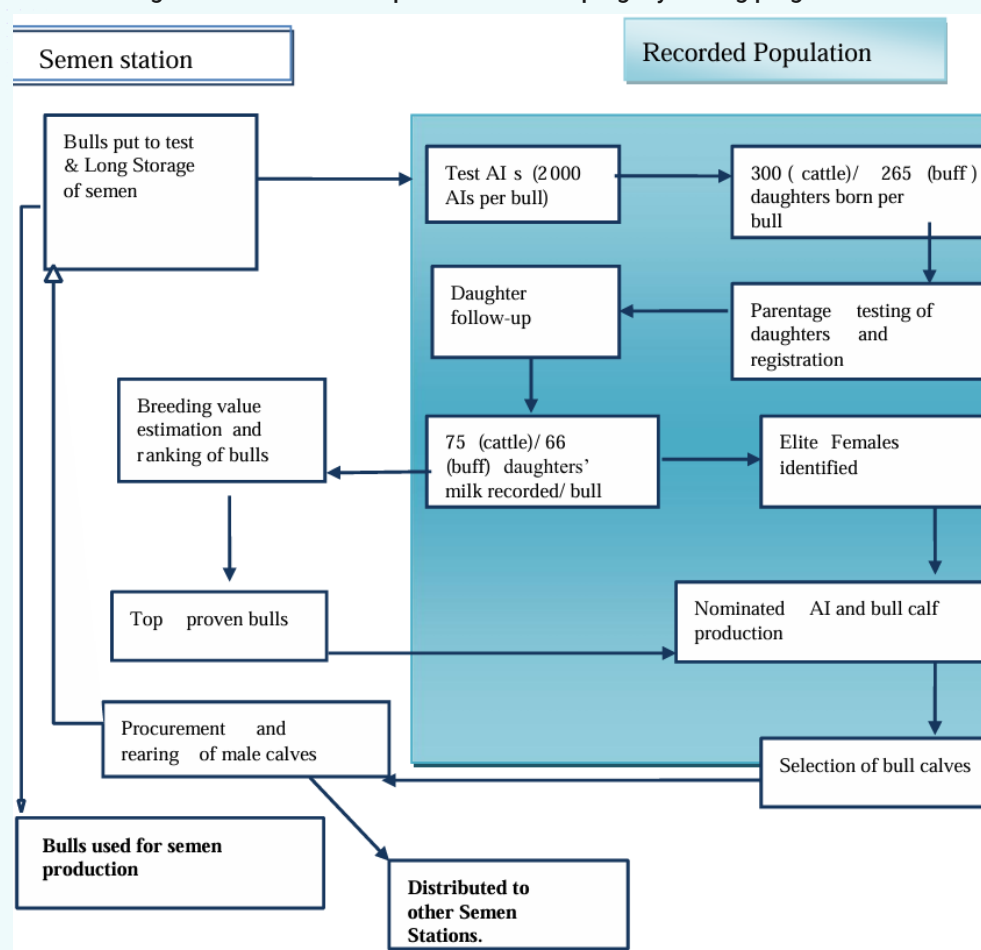
2. Objectives of the Programme The main objectives of the Progeny Testing Programme are:

- a. To produce the required high genetic merit bulls for semen stations through progeny testing
 - b. To establish a system of genetic evaluation of young bulls, bull dams and bull sires and their selection for continuous genetic improvement.
 - c. To achieve a steady genetic progress in the buffaloes or cattle population for milk, fat, SNF and protein yield and type characters in the villages where the progeny testing programme is implemented.
3. A schematic representation of various activities that should be taken up under a progeny testing programme is given in Figure 1.

4. Nominated Mating for production of bulls to be put under PT Programme

Nominated mating using semen of top proven bulls and elite females identified under PT area is taken up for production of bulls for semen production. Bulls with best breeding values BV/GBV are made available to semen stations. Out of the bulls distributed to semen stations only the best bulls are selected on the basis of BV, GBV and Dams lactation yield to put under test mating. Details of mechanism of procurement of bulls for semen production is given under para

Figure1: A Schematic representation of a progeny testing programme



Standard Operating Procedures (SOP) and Minimum Standards

5. Standard Operating Procedures (SOP)

5.1 Test Bulls: The very best bulls that meet the “Standards of Genetic Merit of Breeding Bulls” as specified in the Minimum Standards for Production of Bovine Frozen Semen prescribed by DAHD, GOI should be put under test. Preference should be given to young bulls, less than 4 years in case of cattle and less than 5 years in case of buffaloes. A test bull should be inducted for test AI preferably after producing a minimum of 5000 doses – 2000 for test inseminations and 3000 for long term storage. The test doses should be produced at a Semen Station graded ‘A’ or ‘B’ by CMU, DAHD, GOI. The number of bulls put under test shall be raised from a minimum of 10 to start with and shall be increased to a maximum extent possible.

If a sufficient number of test bulls are not available with the semen station, semen doses (minimum 2000 doses for Test AIs and 3000 doses for long term storage) from quality bulls meeting “Standards of Genetic Merit of Breeding Bulls” as specified in the “Minimum Standards for Production of Bovine Frozen Semen” prescribed by DAHD, GOI, shall be procured from other grade ‘A’ or ‘B’ semen stations.

5.2 Information System

5.2.1 All data related to progeny testing programme such as Animal registration details, AI details, results of Pregnancy Diagnosis, Calving details, Milk recording, Milk component testing, animal re-registration details, Animal movement details, Animal eartag change/renumbering details etc shall be captured through INAPH (Information Network for Animal Productivity and Health) Application.

5.3 Animal Identification

5.3.1 All female animals that are bred with test or nominated AI, all daughters that are born under the project through test AI, all milk recorded animals and all male and female calves that are born out of nominated AI shall be identified by applying ear tags as per prescribed method.

5.4 Operational area

5.4.1 PT Programme for a breed shall be taken up in a compact area where a sizeable number of breedable animals of the identified breed is available and a good AI infrastructure exists. Other factors that should be considered are : sale of animals is comparatively less, percentage of animals of the identified breed under AI coverage is high, aptitude and awareness of the farmers and AI service providers towards the programme is very good, performance of AI technicians is very good etc. AI centres shall be selected based on their performance. The number of centres should be such that all centres together perform minimum 2000 AIs per bull for all bulls put to test, in 12 -15 months period. In case of a Cluster AI centre, only as many villages around the main centre where close follow up, milk recording, supervision and monitoring of the activities is possible shall be included in the programme.

5.5 Test Inseminations

5.5.1 Minimum 2000 doses of each test bull shall be distributed amongst the project villages spread over a test insemination period to carry out at least 2000 test inseminations.

5.5.2 Test insemination period for a bull should be between 12-15 months.

5.5.3 If there exist different PT programmes for a breed in different locations, these PT programmes shall share minimum 1000 test doses and 2000 long term storage doses of at least 30% bulls being tested in their respective PT programme with other PT programme(s) during the same year of testing so that daughters of each bull are produced in all the locations.

5.5.4 The AI Service Provider shall arrange for regular supply of test doses and LN and other consumables to all their AI technicians.

5.5.5 A bull wise, centre wise and month wise semen distribution schedule for all the AI centres covered under the programme shall be prepared and the timely procurement of test doses from semen stations and their timely distribution to all AI centres as per the distribution schedule shall be ensured by the AI Service Provider.

5.5.6 The AI technician would inseminate animals with the test doses supplied to him for that month. When an animal is inseminated for the first time, the animal would be ear-tagged and registered as a dam under the programme and then inseminated. Subsequently, all the animals inseminated and not repeated will be examined for pregnancy after 90 days of AI and then all the pregnant animals are followed for calving and results are updated in INAPH.

Note: At the time of pregnancy diagnosis or calving, if it is noticed that the inseminated animal has subsequently been inseminated by other service provider(s) or served by natural service bull(s), then the details of other service provider or natural service shall be updated in INAPH.

5.6 Daughters' Registration

5.6.1 Upon follow up of calving or receiving the information about the birth of daughter, the AI technician alongwith the concerned supervisor and the Milk recorder should visit the animal and physically verify the animal and the ear tag number of the dam within 45 days of birth. He should also verify the insemination particulars of the dam for verifying the sire number. The daughter then shall be ear-tagged and particulars are entered in INAPH.

5.6.2 Once the daughter is identified, AI Technician shall also record the body measurements to estimate initial body weight.

5.7 Parentage verification

5.7.1 Records of all daughters and male calves born of nominated AI, where the gestation period is found to be less than 265 days (290 days in buffaloes) and greater than 290 days (320 days in buffaloes), should be re-checked for the correct parentage. In all doubtful cases, a blood sample should be taken from both mother and progeny (daughter/ son) and semen sample from the sire, for parentage confirmation using DNA markers.

5.7.2 For parentage confirmation, blood samples from 5 randomly selected daughters registered in each AI centre per year and blood samples of all male calves registered out of nominated AI shall be collected.

5.7.3 A parentage verification database should be created to give feedback to the concerned AI Technicians and supervisors.

5.8 Follow up of Daughters

5.8.1 All daughters born under the programme shall be followed up after birth for growth, AI, pregnancy, calving, and lactation. The milk recorder shall visit all daughters of test bulls at an interval of at least 6 months for this purpose.

5.8.2 A monthly schedule for such visits shall be prepared. During such visits the milk recorder should check for the loss of ear tags, take body measurements and de-worm the daughters. Follow-up of daughter for growth shall be carried out at least at 6 monthly intervals, deworming every six months, and vaccination of all female calves between 4-8 months of age in the project villages for brucellosis.

5.8.3 The follow-up of the daughters shall continue till the daughter calves, dies or is sold, whichever is earlier. In case of loss of ear tags, the milk recorder should apply a new ear tag, record the particulars of new tag and report immediately.

5.8.4 Calf rallies shall be conducted at regular intervals in the project area.

5.9 Recording for body measurements of daughters

5.9.1 The first body measurements of heart girth and length of female calves born should be taken within 45 days of birth at the time of registration and shall be repeated at least at 6 monthly intervals. The first measurement should be taken up by the AI technician and the subsequent measurements by the milk recorder.

5.9.2 Body weight calculated based on Heart Girth and Body Length using the prescribed formula shall be compared with the standard body weight at that age to find out whether a calf is growing satisfactorily and accordingly a feedback should be given to the farmer.

5.9.3 Body length of calf means measurement in inches between point of shoulder and pin bone. Heart girth means circumference of thorax at the point of elbow. Body weight is calculated using the following

formula:

$$\text{Body weight (Kgs)} = (\text{Hearth Girth (inches)})^2 * \text{Body Length (inches)} / 660$$

5.10 Milk Recording

The key points to be considered for milk recording include:

5.10.1 Daughters born out of test inseminations shall be milk recorded for first three lactations. Besides daughters, other animals of the same species (upto a maximum of 5 animals) available with the farmer shall also be recorded for one lactation during that period, irrespective of lactation number (Parity).

5.10.2 The milk recording work should be assigned to exclusive milk recorders. In case an AI technician is covering only one village, he could be entrusted with the responsibility of milk recording.

5.10.3 An area assigned to one milk recorder would depend on the number of animals under milk recording and the spread of animals.

5.10.4 First recording should be carried out on or after 5 days of calving and not later than 25 days of calving.

5.10.5 Milk recording for an animal should be done once a month, morning and evening on the same day (also in the afternoon if three time milking is practiced) preferably on a fixed day of the month (plus or minus 5 days) at the place of milking.

5.10.6 A monthly milk recording schedule shall be prepared, detailing the animal to be recorded, order of recording, address and contact number of the farmer, name of the village, date and time of recording.

5.10.7 Milk recording shall be carried out using a GPS enabled Smart weighing scale (SWS). Total quantity of milk produced by the animal at farmers' household shall be weighed using the SWS along with GPS Coordinates (Latitude and Longitude). Captured data shall be forwarded to INAPH system. However, a transparent calibrated plastic jar with a sensitivity of 100 cc may be used in case of emergency situations when SWS is not working.

5.10.8 On each day of milk recording a milk sample should be taken in a sample bottle (during morning recording), properly labeled, recorded and sent to a laboratory for milk component analysis for fat, SNF, protein etc.

5.10.9 Every animal should be recorded both for milk volume and milk components on a monthly basis continuously for 11 times or until the animal becomes dry or is permanently lost from the system whichever is earlier.

5.10.10 If the animal becomes dry before 11 recordings, the dry date should be recorded invariably.

5.10.11 If weaning is not practiced by the farmer or if the farmer could not be motivated to practice weaning, at least on the day of milk recording, the calf should not be allowed to suckle its mother and the particulars should be recorded in INAPH. Milk collected from all four quarters should be measured and the farmer should be advised to feed the calf separately.

5.10.12 Except during late lactations, milk yield should not be recorded on the day when it has dropped by 50% of the previous recording (respective morning or evening recording) or when the animal is suffering from some form of illness. In such cases the reason for drop should be recorded and the milk recording should be reattempted after a period of at least five days.

5.10.13 If the animal is milked only one time, then only that should be recorded and the other timing should be left blank or recorded zero.

5.10.14 The milk recorder shall also record the details of the milk recordings in a milk recording card that is kept with the animal owner.

5.10.15 Standard Lactation Yield of the milk recorded animal should be calculated using the Test Interval Method described by International Committee for Animal Recording (ICAR).

5.11 Procedures for supervision

The main points to be considered for putting in place an appropriate supervision system include:

5.11.1 Supervisor should exclusively be made responsible for supervising all the activities including milk recording. The number of supervisors should depend on the number of villages a supervisor can supervise in a month, the work load and the distance between the villages.

5.11.2 Each supervisor should every month check all the events happening in that month such as – 100% of daughters born, 100% of male calves reported born through nominated AI and at least 10% of randomly selected morning milk recordings, 30% each of subsequent body measurements, pregnancy results etc. in their assigned villages. The supervisor shall also validate 10% of milk recordings every month. He should submit a tour diary every month.

5.11.3 For checking the milk recordings, the supervisor should conduct the following:

- a. Surprise checking: a surprise check by visiting the site of milking, at the time of the scheduled milk recording and check the procedure of recording, the records and the functionality of the equipment used.
- b. Validation check: Alternatively, the supervisor, on the day of visit to a particular village, should visit a randomly selected animal, which is currently under recording, at the time of milking and measure the quantity of milk produced and record the data. This shall be used to compare the preceding milk recording data of the same animal.
- c. Checking difference between GPS coordinates of milk recordings of same animal and physically verifying differences if any.
- d. In addition to supervisors, activities should also be supervised and monitored by other officers through regular and surprise field visits for checking of milk recording and post milk recording validations, review meetings etc.

5.12 Body typing of daughters

All the daughters born to the test bulls and that are entering the milk recording phase should be subject to body typing. This should be done by the type classifiers who are trained in body typing of animals. The trained type classifiers should type and score the daughters.

5.13 Bull production and procurement

- a. Breeding values (BV) (preferably Genomic Breeding Values - GBV) of animals will be estimated and published by the Breeding Value Estimation Committee constituted by DAHD, GOI.
- b. The actual computation of breeding values shall be done using NDDB's computing facilities at a specified interval of time using all recorded data obtained from the INAPH database and following the models and methods approved by the BV Estimation Committee.

Note: Currently, BV for production traits is estimated using a Random Regression Test Day Animal model (TDRR - BLUP). In the case where records with pedigree are not available for any breed, BV shall be estimated based on dam records corrected for Herd (village or Tehsil based on number of records), Year of calving, Season of calving and Lactation Number. The BVs are expressed as a deviation from a rolling average of animals recorded in a particular project.

- c. Every year, a minimum of five different bulls ranked top on the basis of breeding value shall be used for nominated AI to produce future test bulls. Here it may be noted that higher the intensity of selection applied in selecting bulls for nominated mating higher would be the genetic progress.
- d. Top-ranked females declared elite based on breeding values shall be used for nominated AI. The number of elite females selected for nominated mating would depend on the number of bulls required for semen production for that breed.
- e. In the case of new PT projects, for an initial period of one year, calculation of BV of dams will not be feasible. In such cases, out of dams under milk recording, nominated AI will be done on top 100 dams based on initial test day records. By the time calving of nominated cows occurs, the project will have complete lactation records of all nominated cows. The decision on bull calf procurement for semen production will be taken based on BV calculated based on milk production records available in the project at the end of the first year.

5.14 Male Calf Procurement and Rearing

The points to be considered while procuring male calves include:

- a. A list of elite cow/buffalo along with BV/GBV and BV (or GBV) of a bull calf born out of nominated AI shall be communicated regularly to the projects by NDDDB.
- b. It is suggested that for selection and procurement of one bull calf for semen production, planning shall be done for the production of at least 3 male calves free from diseases. In the breeds where genomic breeding values are available, all male calves that are tested disease-free shall be genotyped. Subsequent to this, the top 1/3rd bull calves with best BVs (preferably GBV) shall be procured as per requirement. Applying a higher intensity of selection on selecting males for AI would lead to significantly higher genetic progress.
- c. All male and female calves born out of nominated AI shall be registered in the INAPH application.
- d. Bull calves shall be procured based on BV (preferably GBV) calculated by NDDDB based on a method prescribed by the Breeding Value Estimation Committee. NDDDB will provide a list of bull calves to be procured regularly to the projects based on the demand of bull calves of the particular breed in the country.
- e. The male calves produced out of nominated AI selected for distribution shall be procured at the earliest possible to avoid loss of such high-quality bull calves.
- f. It should be ensured that all the procured bull calves have a confirmed parentage using DNA markers, have physical attributes conforming to the standard breed characteristics and are free from any physical and congenital abnormalities.
- g. It shall be ensured that the health guidelines prescribed shall be followed.
- h. List of bull calves available for distribution after completion of mandatory quarantine and disease testing shall be communicated to NDDDB on a monthly basis by each PT project.

5.15 Animal Health Protocols for personnel in Project Areas

5.15.1 All personnel working in close contact with the animals namely: AI technicians, milk recorders & supervisors have an important role to play as primary reporters of any adverse health event(s) occurring in their area of operation.

5.15.2 The milk recorder or the AI technician who observes any abnormal health event like high mortality, high rate of abortions/ retention of placenta, mastitis, symptoms of diseases like FMD etc. in his/her area of operation would report the same to an identified/Government appointed Animal Health Officer of the area through his superior.

5.15.3 Bio-security protocols for personnel: All AI technicians would need to follow certain hygienic practices that would minimize the spread of infection.

5.16. Minimum Standards to be achieved

The project shall ensure that the following minimum standards are achieved:

- a. It would be ensured that annually minimum 10 bulls would be put to test for each breed. However, the number of bulls put under test shall be raised to a maximum extent possible.
- b. All the Test bulls should meet the "Standards of Genetic Merit of Breeding bulls" as specified in the "Minimum Standards for Production of Bovine Frozen Semen" prescribed by DAHD, GOI.
- c. The test doses should have been produced only at a Semen Station graded 'A' or 'B' by the Central Monitoring Unit (CMU), DAHD, GOI.
- d. All data related to progeny testing programme shall be captured through INAPH (Information Network for Animal Productivity and Health) application.
- e. All efforts would be made to get complete first lactation records of about 70 daughters per bull spread over a minimum of 5 villages; however, breeding values of bulls put to test will not be published unless the results meet publication criteria decided by Breeding Value Estimation Committee.
- f. If more than one PT programme is being implemented for a breed in different locations, it shall be ensured that complete first lactation records of about 70 daughters per bull is produced together by all these programmes.
- g. At least 80% of the daughters that are tested for parentage using DNA markers shall have correct parentage as recorded.
- h. A minimum of five different proven bulls every year having higher breeding values, with high intensity of selection as possible (i.e. as less number selected out of total bulls, as possible) should be used for nominated AI to produce future test bulls.
- i. Top ranked females declared elite based on breeding values shall be used for nominated AI. In absence of breeding value, females qualifying the dam's yield criteria mentioned under "Standards of Genetic Merit of Breeding bulls" as specified in the Minimum Standards for Production of Bovine Frozen Semen prescribed by DAHD, GOI shall be selected for nominated AI to produce superior male calves.
- j. All bull calves selected through nominated AI shall have confirmed parentage through DNA testing.
- k. Both bull calves that are procured and their dams shall be free from TB, JD, Brucellosis, IBR and any physical deformities.
- l. Achieve 80% of all physical targets and qualify in annual evaluation.

Note: Disease testing protocol while procurement and rearing of bulls produced in PT projects should be same as MSP of Frozen Semen Production.

6. Implementing Agency

6.1 National Dairy Development Board will be implementing Agency for implementation of the project and funds will be released directly to NDDB. Implementation of the project will be monitored as per the minimum standards formulated for implementation of the project.

7. Participating Agencies

7.1 Participating agencies and breeds covered under the programmes are depicted in the following table:

SN	Breed	Participating Agency	State
1	Murrah	NDS(ABRO,Salon)	UttarPradesh
2	Murrah	HLDB	Haryana
3	Murrah	PLDB	Punjab
4	Murrah	NDS(SAGBidaj)	Gujarat
5	JYCB	APLDA	AndhraPradesh
8	JYCB	TCMPF	TamilNadu
6	HFCB	KLDB	Kerala
7	HFCB	NDS(SAGBidaj)	Gujarat
9	Mehsana	MehsanaMilkUnion	Gujarat
10	Mehsana	BanasMilkUnion	Gujarat
11	Jersey	HPLPDB	HimachalPradesh
12	Sahiwal	Sri Ganganagar District Co- operative Milk Producers' Union Ltd (GANGMUL).	Rajasthan
13	Sahiwal	PLDB	Punjab
14	Gir	NDS(SAGBidaj)	Gujarat

8. Fund Flow Mechanism

Funds under the project will be released directly to Implementing Agency. IA will transfer funds to Participating Agencies for implementation of the project.

Pedigree Selection

1. Introduction

One of the key factors affecting productivity is the genetic ability of an animal for milk production, which is an inherited character, while others provide an enabling environment. The breeding bull contributes significantly in enhancing the genetic potential of its progenies for economically important traits like milk production, fat, SNF and protein production, fertility, body conformation etc. Therefore, building an infrastructure for evaluation and production of breeding bulls with high genetic potential for milk production and other important traits and an infrastructure to transmit their genetic potential to maximum number of progenies is very important in any animal breeding programme.

Selection of bulls could be done through methods like Progeny Testing (PT) or Pedigree Selection (PS). Among the indigenous breeds, efforts are to be made to select bulls through Pedigree Selection owing to lack of large AI coverage and smaller population that makes Progeny Testing unfeasible. Selecting the best bulls based on the performance of their parent's (milk production of dams in case of milk production traits) forms the basis of Pedigree Selection. This document describes the Standard Operating Procedures (SOP) and minimum standards for implementing a Pedigree Selection programme for Cattle and Buffalo under field conditions and for production of quality bulls by inseminating best performing elite females owned by farmers using semen of high genetic merit bulls

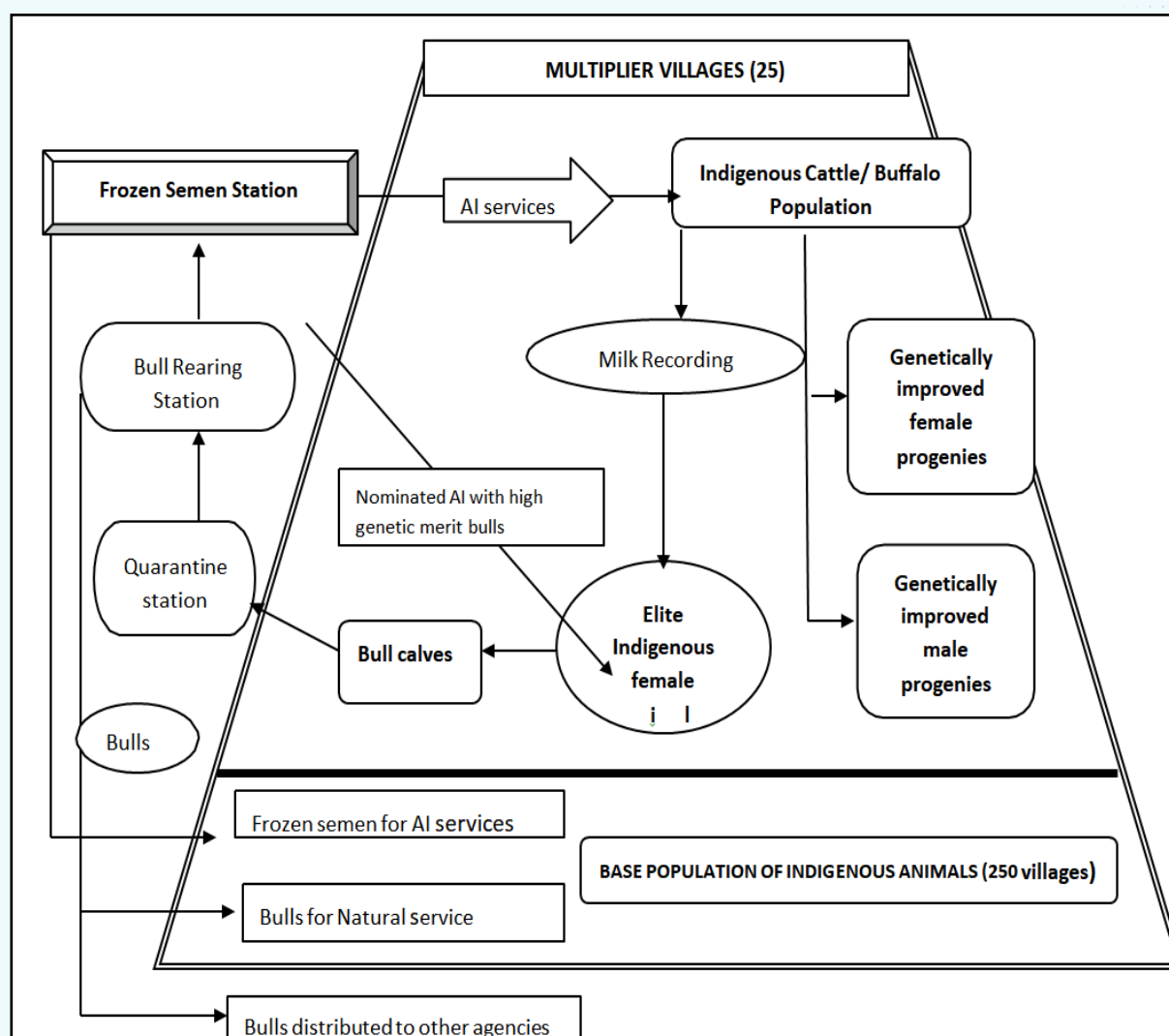
2. Objectives of the Programme

The main objectives of the programme are:

- a. Developing indigenous breeds in their native breeding tracts
- b. Improving the genetic potential of indigenous breeds for milk production in their native tracts
- c. Producing genetically superior quality bulls for semen production stations of the country
- d. Ensuring active participation of the communities in breed development programmes

A schematic representation of various activities that should be taken up in a Pedigree Selection programme is given in Figure 1.

Figure1:Schematic representation of the Technical programme Standard Operating Procedures (SOP) and Minimum Standards



3. Standard Operating Procedures (SOP): For ongoing PS programme with AI network

3.1 Bulls and semen used in AI programme in PS area

3.1.1 Semen from atleast 5 bulls of high genetic merit shall be used in the AI programme annually in the PS area.

3.1.2 AI bulls should be changed / rotated among the multiplier villages at least once in every 3 years in order to keep inbreeding under control.

3.1.3 Semen produced from a semen station graded "A" or "B" by CMU, DAHD, GOI shall only be used.

3.2 Information System

3.2.1 All data such as Animal registration details, AI details, results of Pregnancy Diagnosis, Calving details, Milk recording, Milk component testing, animal re-registration details, Animal movement details, Animal ear tag change/renumbering details etc. shall be captured through INAPH (Information Network for Animal Productivity and Health) Application.

3.3 Animal Identification:

All female animals inseminated under AI programme, animals under milk recording, all females that are born under the general AI programme and all male calves and female calves born out of nominated AI (best semen used on best recorded females available in PS area) shall be identified by applying ear tags as per prescribed method.

3.4 Artificial Insemination and followup

3.4.1 When an animal is inseminated for the first time, the animal would be ear-tagged and registered as a dam under the programme and then inseminated. Subsequently, all the animals inseminated and not repeated will be examined for pregnancy after 90 days of AI and then all the pregnant animals are followed for calving and results are updated in INAPH.

Note: At the time of pregnancy diagnosis or calving, if it is noticed that the inseminated animal has subsequently been inseminated by other service provider(s) or served by natural service bull(s), then the details of other service provider or natural service shall be updated in INAPH.

3.5 Registration of calves:

3.5.1 Upon follow-up of calving or receiving the information about the birth of female or male calf born from nominated AI, the AI technician along with the concerned supervisor and the Milk recorder / local resource person shall visit the calf and physically verify the animal. The ear tag number of the dam, insemination particulars of the dam and the sire number shall be checked. The calf shall be ear tagged within 45 days of birth and the particulars entered in INAPH.

3.6 Parentage verification:

3.6.1 Records of all female and male calves born of nominated AI in PS area where the gestation period is found to be less than 265 days (290 days in buffaloes) and greater than 290 days (320 days in buffaloes) would be re-checked for correct parentage. In all doubtful cases, a blood sample would be taken from both mother and progeny (female / male) and semen sample from the sire, for parentage confirmation using DNA markers.

3.6.2 Blood sample from randomly selected five female registered out of AI per AI centre shall be sent for DNA parentage verification every year.

3.6.3 A blood sample of all male calves registered out of nominated AI in PS area would be collected for parentage confirmation.

3.6.4 Parentage verification database would be created to give feed back to the concerned AI Technicians and supervisors.

3.7 Calf rallies:

3.7.1 Calf rallies shall be conducted in the area to create awareness about the programme and to provide platform to the farmers to exhibit their improved animals

3.8 Milk Recording

The key points to be considered for milk recording in the PS area include:

3.8.1 The milk recording work should preferably be assigned to exclusive milk recorders. In case an AI technician is covering only one village/ the number of AI performed is low, he could be entrusted with

the responsibility of milk recording also.

3.8.2 Area assigned to one milk recorder would depend on the number of animals under milk recording and the spread of animals.

3.8.3 First recording would be carried out on or after 5 days of calving and not later than 25 days of calving.

3.8.4 Milk recording for an animal should be done once a month, morning and evening on the same day (also in the afternoon if three time milking is practiced), preferably on a fixed day of the month (plus/minus 5 days) at the place of milking.

3.8.5 A monthly milk recording schedule shall be prepared, detailing the animal to be recorded, order of recording, address and contact number of the farmer, name of the village, date and time of recording.

3.8.6 Milk recording shall be carried out using a GPS enabled Smart weighing scale (SWS). Total quantity of milk produced by the animal at farmers' household shall be weighed using the SWS along with GPS Coordinates (Latitude and Longitude). Captured data shall be forwarded to INAPH system. However, a transparent calibrated plastic jar with a sensitivity of 100 cc may be used in case of emergency situations when SWS is not working.

3.8.7 On each day of milk recording a milk sample should be taken in a sample bottle (during morning recording), properly labeled, recorded and sent to the laboratory for milk component analysis.

3.8.8 Every animal should be recorded both for milk volume and milk components on a monthly basis continuously for 11 times or until the animal becomes dry or is permanently lost from the system whichever is earlier.

3.8.9 If the animal becomes dry before 11 records, the dry date should be recorded invariably.

3.8.10 If weaning is not practiced by the farmer or if the farmer could not be motivated to practice weaning, at least on the day of milk recording the calf should not be allowed to suckle its mother and the particulars should be recorded in INAPH. Milk collected from all four quarters should be measured and the farmer should be advised to feed the calf separately.

3.8.11 Except during late lactation, milk yield should not be recorded on the day when milk has dropped suddenly by 50% of the previous recording (respective morning or evening recording) or when the animal is suffering from some form of illness. In such cases the reason for sudden drop should be recorded and the milk recording should be reattempted after a period of at least five days.

3.8.12 If the animal is milked only one time, then only that would be recorded and the other timing would be left blank or recorded zero.

3.8.13 The milk recorder shall also record the details of the milk recordings in a milk recording card that is kept with the animal owner.

3.8.14 Standard Lactation Yield of the milk recorded animal should be calculated using the Test Interval Method described by International Committee for Animal Recording (ICAR).

3.8.15 It is also suggested that whenever any animal with the farmer is recorded, other animals of the same breed (up to a maximum of 5 animals) available with the farmer shall also be recorded for one lactation during that period, irrespective of lactation number (Parity).

3.9 Procedures for supervision

The main points to be considered for putting in place an appropriate supervision system include:

3.9.1 Supervisor should exclusively be made responsible for supervising all the activities including milk recording. The number of supervisors would depend on the number of villages a supervisor can supervise in a month, the work load and the distance between the villages.

3.9.2 Each supervisor should every month check all the events happening in that month such as – 100% of female born and 100% of male calves reported born to nominated AI, randomly check at least 10% of morning milk recordings and 30% pregnancy diagnosis results in their assigned villages. The supervisor shall also validate 10% of milk recordings every month. He should submit a tour diary every month.

3.9.3 For checking the milk recordings, the supervisor should conduct the following:

3.9.3.1 **Surprise checking:** a surprise check by visiting the site of milking, at the time of the scheduled milk recording and check the procedure of recording, the records and the functionality of the equipment used.

3.9.3.2 **Validation check:** Alternately, the supervisor should, on the day of visit to a particular village, visit a randomly selected animal, which is currently under recording, at the time of milking and measure the quantity of milk produced and record the data. This shall be used to compare with the preceding milk recording data of the same animal.

3.9.3.3 Checking difference between GPS coordinates of milk recordings of same animal and physically verifying differences if any.

3.9.3.4 In addition to supervisors, project activities should also be supervised and monitored by other Project officers, through regular and surprise field visits for checking of milk recording and post milk recording validations, review meetings etc.

4. Bull production and procurement

4.1 Breeding values (BV) (preferably Genomic Breeding Values - GBV) of male calves produced under PS programme will be estimated and published by the Breeding Value Estimation Committee constituted by DAHD, GOI.

4.2 The actual computation of breeding values shall be done using NDDB's computing facilities at a specified interval of time using all recorded data obtained from the INAPH database and following the models and methods approved by the BV Estimation Committee.

Note: Currently, BV for production traits is estimated using a Random Regression Test Day Animal model (TDRR - BLUP). In the case where records with pedigree are not available for any breed, BV shall be estimated based on dam records corrected for Herd (village or Tehsil based on number of records), Year of calving, Season of calving and Lactation Number. The BVs are expressed as a deviation from a rolling average of animals recorded in a particular project.

4.3 Top-ranked females declared elite based on breeding values shall be used for nominated AI. The number of elite females selected for nominated mating would depend on the number of bulls required for semen production for that breed.

4.4 In the case of new PS projects, for an initial period of one year, calculation of BV of dams will not be feasible. In such cases, out of dams under milk recording, nominated AI will be done on top 100 dams based on initial test day records. By the time calving of nominated cows occurs, the project will have complete lactation records of all nominated cows. The decision on bull calf procurement for semen production will be taken based on BV calculated based on milk production records available in the project

at the end of the first year.

4.5 Male Calf Procurement and Rearing

The points to be considered while procuring male calves include:

4.5.1 A list of elite cow/buffalo along with BV/GBV and BV (or GBV) of a bull calf born out of nominated AI shall be communicated regularly to the projects by NDDB.

4.5.2 It is suggested that for selection and procurement of one bull calf for semen production, planning shall be done for the production of at least 3 male calves free from diseases. In the breeds where genomic breeding values are available, all male calves that are tested disease-free shall be genotyped. Subsequent to this, the top 1/3rd bull calves with best BVs (preferably GBV) shall be procured as per requirement. Applying a higher intensity of selection on selecting males for AI would lead to significantly higher genetic progress.

4.5.3 All male and female calves born out of nominated AI shall be registered in the INAPH application.

4.5.4 Bull calves shall be procured based on BV (preferably GBV) calculated by NDDB based on a method prescribed by the Breeding Value Estimation Committee. NDDB will provide a list of bullcalves to be procured regularly to the projects based on the demand of bull calves of the particular breed in the country.

4.5.5 The male calves produced out of nominated AI selected for distribution shall be procured at the earliest possible to avoid loss of such high-quality bull calves.

4.5.6 It should be ensured that all the procured bull calves have a confirmed parentage using DNA markers, have physical attributes conforming to the standard breed characteristics and are free from any physical and congenital abnormalities.

4.5.7 It shall be ensured that the health guidelines prescribed shall be followed.

4.5.8 List of bull calves available for distribution after completion of mandatory quarantine and disease testing shall be communicated to NDDB on a monthly basis by each project.

4.6 Animal Health Protocols for personnel in Project Areas

4.6.1 All personnel working in close contact with the animals namely: AI technicians, milk recorders & supervisors have an important role to play as primary reporters of any adverse health event(s) occurring in their area of operation.

4.6.2 The milk recorder or the AI technician who observes any abnormal health event like high mortality, high rate of abortions/ retention of placenta, mastitis, symptoms of diseases like FMD etc. in his/her area of operation would report the same to an identified/Government appointed Animal Health Officer of the area through his superior.

4.7 Bio-security protocols for personnel: All AI technicians would need to follow certain hygienic practices that would minimize the spread of infection.

4.8 Minimum Standards to be achieved

4.8.1 The programme shall ensure that the following minimum standards are achieved:

4.8.2 It would be ensured that semen from at least 5 bulls of high genetic merit bulls shall be used in the AI programme annually in PS area.

- 4.8.3 Semen produced from a semen station graded “A” or “B” by DAHD shall only be used.
- 4.8.4 AI bulls should be changed / rotated among the multiplier villages at least once in every 3 years in order to keep inbreeding under control.
- 4.8.5 All data related to Pedigree Selection programme shall be captured through INAPH (Information Network for Animal Productivity and Health) application.
- 4.8.6 At least 80% of the calves that are tested for DNA based parentage tests shall have correct parentage as recorded.
- 4.8.7 All bulls whose semen is used in the AI programme should have dam’s milk yield more than the yield specified in the “Standards of Genetic Merit of Breeding bulls” in the Minimum Standards for Production of Bovine Frozen Semen prescribed by DAHD.
- 4.8.8 Cows/ buffaloes selected for nominated AI shall have milk yield recorded for a complete lactation and have milk yield more than the yield specified in the “Standards of Genetic Merit of Breeding bulls” in the Minimum Standards for Production of Bovine Frozen Semen prescribed by DAHD.
- 4.8.9 All bull calves selected through nominated AI shall have confirmed parentage through DNA testing.
- 4.8.10 Both bull calves that are procured and their dams shall be free from TB, JD, Brucellosis, IBR and any physical deformities.
- 4.8.11 Achieve 80 % of all physical targets and qualify in annual evaluation.
- 4.8.12 The establishment of Central herd Registration Scheme will be deployed for monitoring and implementation of pedigree selection programme.

Note: Disease testing protocol while procurement and rearing of bull sproduced in PS projects should be same as MSP of Frozen Semen Production.

5. Implementing Agency:

National Dairy Development Board will be implementing Agency for implementation of the project. Implementation of the project will be monitored by NDDDB as per the minimum standards formulated for implementation of the project.

6. Participating Agencies:

Participating agencies and breeds covered under the programmes are depicted in the following table:

SN	Breed	Participating Agency	State
1	Haryana	HLDB	Haryana
2	Jaffrabadi	NDS(SAGBidaj)	Gujarat
3	Kankrej	BanasMilkUnion.	Gujarat
4	Nili-Ravi	PLDB	Punjab
5	Pandharpuri	MLDB	Maharashtra
6	Tharparkar	RLDB	Rajasthan
7	Rathi	URMULTrust	Rajasthan

It is proposed to initiate New Pedigree selection project for Banni breed of buffalo from current year. Sarhad Dairy (Kutch District Cooperative Milk Union) will be participating agency of the project. This will enable creation of AI network in the breeding tract of Banni buffalo.

Fund Flow Mechanism

Funds under the project will be released directly to Implementing Agency. IA will transfer funds to Participating Agencies for implementation of the project.

Support to semen Production- Strengthening of Existing Semen Stations

1. Rationale

1.1 In order to extend AI coverage from existing 30% of the breedable bovine females to 70% of the breedable bovine females, semen production is to be increased from 119 million doses to 200 million doses. Therefore there is a need to strengthen existing semen station to meet demand of semen doses in the country. Semen stations which are not covered under NDP-I will also be covered under the component. Also there is always a need to keep semen stations up to the international standards so that our farmers receive quality Frozen Semen doses for AI delivery system. Semen stations continuously need to improve themselves to meet the improving standards of semen production and biosecurity.

1.2 Semen Stations which were not covered under NDP-I scheme and semen stations which were covered under NDP-I scheme but have completed five years of strengthening can submit proposal for strengthening of Semen Station under Rashtriya Gokul Mission scheme.

1.3 NDDDB will assist semen stations in formulation of project document after detailed analysis of the infrastructure available and further strengthening required to meet requirement of semen doses under RGM.

2. Components Covered:

2.1 Induction of HGM Bulls: The bulls required shall be sourced from ongoing Progeny Testing (PT), Pedigree Selection (PS), IVF technology, genomic selection, bulls born out of imported embryos/ semen and bulls imported for semen production. All bulls available at the semen stations would be genomically tested using genomic chip.

2.2 Civil Works Semen stations shall build structures that blend well with the semen production operations and are cost effective. Semen station shall give details of bull shed/ bull pen required for housing additional bulls and capacity of quarantine shed required for quarantining of bulls to be inducted at the semen station. In addition to the above, few structures such as bio-gas plant, incinerator and protection walls may also be proposed by the semen station as a part of strengthening.

2.3 Laboratory Equipment Semen stations may propose funds to upgrade existing laboratories with modern amenities and latest equipment in semen production and processing. The lab equipments will not only enhance the efficiency of the laboratory, but also ensure the quality of the product produced. Semen stations shall give details of the lab equipments required in the project document and indicate number of doses produced after strengthening.

2.4 Farm Machinery and Equipment Semen stations may propose funds to strengthen existing fodder farm operations and procure new farm machinery to increase the effectiveness and efficiency of fodder farm operations.

2.5 ICT for Semen Station For installation of SSMS/INSPRM system developed by NDDDB year wise ICT related infrastructure required and its costs

2.6 Training and Capacity building Semen stations may propose funds for training and retraining of existing manpower and for newly inducted manpower. Total cost of training and retraining of manpower may be given in the project document.

3 Preparation of the project

3.1 Expert team from NDDB will assist semen station in formulation of project proposal after detailed analysis of the infrastructure available and further strengthening required for meeting requirement of semen doses under RGM.

4. Project Management Committee

4.1 The project will be managed, monitored and reviewed by a Management Committee to be constituted by Semen Station.

4.2 The Committee, if it desires, would also call special invitees to attend the meeting. The general superintendence, direction, control and management of the affairs and activities of the project will vest in the Management Committee. The Management Committee will ensure the effective implementation of the project and that the objectives herein mentioned are achieved.

5. Implementing Agency:

5.1 Semen stations under the control of SLDB, Milk Federation (Dairy Cooperatives) and NDDB will be assisted under the project. SLDBs, Milk Federation, NDDB will be Implementing Agency for Implementation of the project.

6. Fund Flow Mechanism:

Funds will be released directly to implementing agencies under RGM for implementation of the project.

Accelerated Breed Improvement Programme

1. Objective of the Project

- 1.1 Enhancing milk production and productivity through propagation of high yielding animals
- 1.2 Increasing availability of elite animals for milk production and for sale with the farmers
- 1.3 Creating additional income resources for farmers by using high yielding animals as donors.
- 1.4 Increasing availability of disease free animals of desired production and productivity.
- 1.5 Making IVF technology affordable and thereby increasing acceptability of IVF technology among farmers.

2. Action Plan

2.1 Project will be implemented through NDDDB as implementing agency (IA) in identified milk pockets. Milk Federations/Milk Union will be participating Agency (PA) for implementation of the project.

2.2 Selection of service provider

2.2.1 The service providers identified to run operations of CCBF IVF would be allowed to be the service provider for this programme.

2.2.2 The National Dairy Development Board (NDDDB) will float tender/RfP for discovery of rates from service providers for getting assured pregnancy in low producing recipients.

2.2.3 Payment to the service provider will be made on the basis of assured pregnancy at 90 days. In case there is no pregnancy established by the service provider there will be no payment (NPNP).

2.2.4 Service provider will be selected on least cost basis and allowed to establish pregnancy among low producing recipients.

2.2.5 Service provider will manage its own IVF lab or may make own arrangement to use IVF lab available in the States, established under Rashtriya Gokul Mission. Service provider will arrange all consumables for the project including hormones for estrus synchronization in recipients **or may arrange to use IVF labs available with CCBFs.**

2.2.6 Service provider will be allowed to use embryos of high genetic merit meeting MSP standards produced from elite donors maintained at its own donor farm or donors meeting MSP standards available with farmers.

2.2.7 Looking at the size of the project, more than one service providers may be awarded the portions of the targeted number of pregnancies with the condition to work in simultaneously at the same cost.

2.3 Selection of donors

2.3.1 Service provider will be allowed to use donors which are disease free as per the protocol prescribed in MSP for semen production. MSP for selection of donors is given at **Annexure-I.**

2.4 Donors available with Farmers:

2.4.1 Service provider will be allowed to use animals above MSP available with farmers as donors for oocytes collection. The milk production record of the donor cows is to be as per the milk recording system approved for Progeny Testing/Pedigree Selection programs under RGM project/ genomically tested. All the donors are to be registered in INAPH data base or certified by Milk Union.

2.4.2 Service provider may make available incentives to farmers managing donor animals **@ Rs 1000 per embryos/Rs 4000 per OPU session.**

2.5 Selection of Beneficiaries

2.5.1 Farmers interested in taking up IVF technology will register with concerned Milk Federations/milk union or interested farmers may contact NDDB to taking up IVF pregnancy.

Incentives to farmers

2.5.2 Incentive @ Rs 5000 per pregnancy will be made available to the farmer as Government of India share. Milk Federations/Milk Unions may either further subsidize or facilitate farmers in taking bank loan for IVF pregnancy.

2.5.3 Assistance will be limited under the scheme for production of 1 female calf per beneficiary.

2.5.4 Male calves may be purchased by the LDBs/ semen stations for semen production. In case the male calf does not qualify the prescribed requirements, it would be the discretion of the concerned recipient owner/Milk Union to take decision on the disposal of the male calf.

2.6 Selection of semen:

2.6.1 Service provider will be allowed to use only sex sorted semen of bulls of very high genetic merit. In case of HF sire dam's lactation yield (ME) above 11000 kg; in case of Jersey sire dam's lactation (ME) above 7500 kg and in case of indigenous cattle and buffalo breeds sire dam's lactation (ME) above 4000 kg. In case of crossbred semen shall be from bulls with dams lactation yield (ME) above 6000 kg in case of CBHF and (ME) above 4000 kg in case of CB Jersey.

2.6.2 In exotic breeds sire with positive estimated breeding values for volume of milk, milk fat and milk protein will selected. In case of indigenous cattle and buffalo breeds preference will be given to the sires with positive estimated breeding values or genomic estimated breeding values.

2.6.3 Sex sorted semen will be procured by the service provider from 'A' graded semen stations.

2.6.4 Service provider may also use imported sex sorted semen of indigenous/exotic breeds of desired standards and specifications.

2.7 Veterinary Aid:

2.7.1 Concerned Milk Union may take responsibility to provide veterinary aid to the calves born under IVF programme.

2.7.2 Calves born under the programme will be registered using AUID and data shall be uploaded on INAPH data base.

2.7.3 Growth and health data of calves will be maintained by the concerned Milk Union. 2.7.4 At sexual maturity, female calves born under the programme may be inseminated preferably using sex

sorted semen of high genetic merit bulls.

3. Beneficiaries covered under the programme

3.1 It is proposed that 2 lakh pregnancies will be established over a project period of 3 years @ 66,000 pregnancy per year. About 2 lakh farmers will be benefitted from the project. During the project period 1.8 lakh female calves with high milk yielding potential will be added to the national milch herd. Project will be implemented through NDDDB and during Phase-I, project will be implemented in the milk shed of 87 Milk Unions procuring more than 1 lakh lts of milk per day.

4. Financial Implication:

4.1 Financial implication of the project is depicted in the following table

S. No.	Activity Component	Government of India Share Rs in lakh	Total Rs in lakh
1	Farmers incentives for 2lakh pregnancies	10000	10000
2.	Parentage testing	500	500
3	Farmers awareness programme (publication of leaflets, organization of seminars, milk yield competition etc)	50	50
3	Monitoring of the project by NDDDB	500.00	500.00
4	Mid Term evaluation	50.00	50.00
5	Additional Manpower required at Head Quarter for implementation of the project (Veterinary Consultants(2), dataentry operator(2))	60	60
	Total	11160	11160

4.2 An amount of Rs 111.60 crore has been for implementation of the project over the duration of 3 years.

5. Implementing Agency and Fund Flow Mechanism:

5.1 National Dairy Development Board (NDDDB) will be the Implementing Agency (IA) of the project. Funds will be released directly to NDDDB for implementation of the programme. During 1st Phase, project will be implemented in milk shed of 87 Milk Unions procuring more than 1 lakh lts of milk per day. List of Milk Unions is given at Annexure II. From the project incentives will also be made available to farmers for getting assured pregnancy through IVF technology from the service providers identified by Government of India for CCBFs located in the State of Gujarat, Rajasthan, Karnataka, Tamil Nadu, Odisha and Uttar Pradesh.

5.2 Milk Federations/Milk Unions will be participating agency of the project. NDDDB will release funds to Milk Federations/Milk Union in the bank account linked with PFMS as explained earlier in the guidelines.

6. Impact of the Programme:

6.1 With the implementation of the project 1.7 lakh (85% female calves and 15% male calves) female calves would be born. Out of which 144500 (15% would be deaths and culled with different reasons) high yielding females will be added to the milch herd thus additional 578000 tonnes of milk will be added annually from 1.45 lakh additional high yielding milch animals produced under the programme. Additional amount of Rs 17340 crores will be added annually to the rural economy of the country after three years of the project implementation. Thus with investment of Rs 111 crores return will be Rs

17340 crores from the project or with investment of Rs 1 in implementation of the project return on investment will be more than Rs 156.

6.2 Dairy farmers income through sale of milch animals will be increased by 1180 crores by taking cost of the high yielding milch animals as Rs 100000 per animal (In case all the female animals are sold).

6.3 Milk production in the country will grow at a much faster rate. Growth in milk production will be sustainable and will be continued over the years with the proposed investment.

7. Monitoring of the project:

7.1 Project will be monitored by National Dairy Development Board over duration of five years and funds are proposed under the project for monitoring of the project activities. Monthly progress report will be prepared by the participating milk unions/service providers and submitted to this Department through NDDDB. All the activities related to IVF pregnancies shall be uploaded on INAPH data base. Provision will be made by NDDDB for uploading IVF data on INAPH data base.

State Level

7.2 State/UT Level Review Committee meeting will be held every month under the Principal Secretary (Dairy Development/Animal Husbandry & Dairy Development) of the State to review progress of physical, financial and technical parameters. PD/MD of Milk Union/Milk Federation, CEO of LDB, Director (Animal Husbandry), and breeding experts of State veterinary University will be its members. Joint Secretary, DAHD or his representative will attend meeting once in every quarter.

Milk Federation/Milk Union

7.3 Monthly progress report will be prepared by the participating Milk Union and same will be reviewed by NDDDB. All the activities related to implementation of the project shall be noted and submitted to State Dairy Development/Animal Husbandry & Dairy Development Department.

7.4 Milk Federation/Milk Union will facilitate farmers for taking up parentage testing of atleast 10% calves born under the programme in consultation with NDDDB. Cost of parentage testing is available at the rate Rs 1700 per test. Test will be conducted at the testing facility available with NDDDB. Arrangement will be made by NDDDB for sample collection and dispatch of samples to laboratory.

Minimum Standard and specifications for Donors

S. no.	Breed	1 st lactation yield	Best lactation yield	Breeding value, if available	Gnomically estimated breeding value, (mandatory)
1.	Gir	3500	4000	+Ve	+Ve
2.	Sahiwal	3500	4000	+Ve	+Ve
3.	Red Sindhi	3500	4000	+Ve	+Ve
4.	Kankrej	3000	3000	+Ve	+Ve
5.	Tharparkar	3000	3500	+Ve	+Ve
7.	Rathi	3500	4000	+Ve	+Ve
8.	Murrah	3500	4000	+Ve	+Ve
9.	Nili Ravi	3500	4000	+Ve	+Ve
10.	Mehsana	3500	4000	+Ve	+Ve
11.	HF Pure	9000	10000	+Ve	+Ve
12.	Jersey	7000	8000	+Ve	+Ve
13.	CBJY	3400	4100	+Ve	+Ve
14.	CBHF	4400	6000	+Ve	+Ve

Appendix-I

"A" Graded Milk Unions

LIQUID MILK PROCUREMENT (TKGPD) : PROVISIONAL				
S.No.	STATE	UNION	Avg. 2019-20	Grading
1	BIHAR	Begusarai	455	A
2	BIHAR	Muzaffarpur	227	A
3	BIHAR	Patna	312	A
4	BIHAR	Samastipur	363	A
5	BIHAR	Shahbad	208	A
6	JHARKHAND	Jharkhand Federation	117	A
7	ODISHA	Cuttack	184	A
8	HARYANA	Hissar Jind	117	A
9	PUNJAB	Amritsar	121	A
10	PUNJAB	Jalandar	172	A
11	PUNJAB	Ludhiana	380	A
12	PUNJAB	Patiala	105	A
13	PUNJAB	Ropar	493	A
14	RAJASTHAN	Ajmer	284	A
15	RAJASTHAN	Alwar	147	A
16	RAJASTHAN	Bhilwara	275	A
17	RAJASTHAN	Chittorgarh	113	A
18	RAJASTHAN	Ganganagar	106	A
19	RAJASTHAN	Jaipur	1,140	A
20	ANDHRA PRADESH	Guntur	279	A
21	ANDHRA PRADESH	Krishna	198	A
22	ANDHRA PRADESH	Vishakha	718	A
23	TELANGANA	Karimnagar	155	A
24	TELANGANA	TDDCF	269	A
25	KARNATAKA	Bengaluru	1,582	A
26	KARNATAKA	Belgaum	186	A
27	KARNATAKA	Bijapur	149	A
28	KARNATAKA	Chamarajanagara	234	A
29	KARNATAKA	D. Kannada	436	A
30	KARNATAKA	Dharwad	234	A
31	KARNATAKA	Hassan	874	A
32	KARNATAKA	Kolar	962	A
33	KARNATAKA	Mandya	768	A
34	KARNATAKA	Mysore	545	A
35	KARNATAKA	Raichur	191	A
36	KARNATAKA	Shimoga	520	A

LIQUID MILK PROCUREMENT (TKGPD) : PROVISIONAL				
S.No.	STATE	UNION	Avg. 2019-20	Grading
37	KARNATAKA	Tumkur	704	A
38	KERALA	Ernakulam	305	A
39	KERALA	Malabar	647	A
40	KERALA	Thiruvananthapuram	320	A
41	TAMIL NADU	Chen.Mgr	137	A
42	TAMIL NADU	Coimbatore	152	A
43	TAMIL NADU	Dharmapuri	174	A
44	TAMIL NADU	Erode	209	A
45	TAMIL NADU	Madurai	220	A
46	TAMIL NADU	Namakkal	155	A
47	TAMIL NADU	North Arcot (Vellore)	254	A
48	TAMIL NADU	Salem	477	A
49	TAMIL NADU	Villupuram (S Arcot)	223	A
50	TAMIL NADU	Thiruvannamalai	149	A
51	TAMIL NADU	Tiruppur	232	A
52	TAMIL NADU	Trichy	482	A
53	GUJARAT	Ahmedabad	317	A
54	GUJARAT	Amreli	107	A
55	GUJARAT	Banaskantha	6,014	A
56	GUJARAT	Bharuch	179	A
57	GUJARAT	Bhavanagar	239	A
58	GUJARAT	Botad	124	A
59	GUJARAT	Gandhinagar	269	A
60	GUJARAT	Kaira	3,020	A
61	GUJARAT	Kutch	271	A
62	GUJARAT	Mehsana	2,741	A
63	GUJARAT	Morbi	123	A
64	GUJARAT	Panchmahal	1,362	A
65	GUJARAT	Porbandar	255	A
66	GUJARAT	Rajkot	403	A
67	GUJARAT	Sabarkantha	2,710	A
68	GUJARAT	Surat	1,361	A
69	GUJARAT	Surendernagar	493	A
70	GUJARAT	Vadodara	630	A
71	GUJARAT	Valsad	835	A
72	MADHYA PRADESH	Bhopal	294	A
73	MADHYA PRADESH	Indore	281	A
74	MADHYA PRADESH	Ujjain	170	A
75	MAHARASHTRA	Baramati Taluka	225	A

LIQUID MILK PROCUREMENT (TKGPD) : PROVISIONAL				
S.No.	STATE	UNION	Avg. 2019-20	Grading
76	MAHARASHTRA	Godavari-Kopargaon Taluka	134	A
77	MAHARASHTRA	Jalgaon	270	A
78	MAHARASHTRA	Kolhapur	1,089	A
79	MAHARASHTRA	Pune	215	A
80	MAHARASHTRA	Rajaram Babu Patil-Walwa	135	A
81	MAHARASHTRA	Sangamner Taluka	356	A
82	MAHARASHTRA	Shree Warna	275	A
Producer Companies				
83	UTTAR PRADESH	Saahaj	580	A
84	PUNJAB	Baani	281	A
85	RAJASTHAN	Paayas	879	A
86	ANDHRA PRADESH	Shreeja	404	A
87	GUJARAT	Maahi	801	A
Source: Milk Unions & Federations				

BREED MULTIPLICATION FARM

1. Introduction

At present entrepreneurs/farmers interested in taking up dairy programme are facing difficulties in sourcing disease free high yielding heifers or cows and farmers are dependent on either middlemen or other farmers maintaining dairy animals for sourcing low producing animals from other farmers engaged in dairying. There is no system available in the country for producing disease free elite animals of indigenous breeds of cattle and buffalo or exotic breeds of cattle. Therefore it is proposed to establish breed multiplication farms to make available disease free high yielding heifers/ pregnant heifers / cows preferably of indigenous breeds of cattle/buffaloes in the country.

Breed multiplication farm is proposed to be established through entrepreneurship model for making available high genetic merit heifers (HGM) to farmers to fulfill their need of general shortage of such animals.

It is proposed to make available 50% capital subsidy to interested entrepreneur for construction of cattle sheds, equipment, procurement of elite bull mothers etc. The entrepreneur will establish breed multiplication farm (BMF) and produce elite heifers using sex sorted semen or IVF technology.

Disease free heifers produced at the BMF will be made available to interested farmers on cost basis HGM bulls born at BMF will be procured by semen stations for semen production. BMF will also act as the training centre to conduct training for farmers and entrepreneurs.

2. Objective:

- To develop private entrepreneurs for undertaking cattle and buffalo breeding
- To make available disease free high yielding heifers/ pregnant heifers / cows preferably of indigenous breeds of cattle/buffalo.
- To incentivize private individuals Entrepreneurs, FPOs, SHGs, **FCOs**, JLGs, and Section 8 companies for establishment of breed multiplication farm
- Spreading awareness about scientific management practices including animal nutrition, disease prevention etc
- Multiplication of high yielding milch animals through scientific breeding including IVF technology and sex sorted semen

3. Essential Criteria of selection of entrepreneur:

- The entrepreneur-aggregator can be a private individuals / FPOs / FCOs/**SHGs** /
- JLGs and Section 8 companies.
- Entrepreneur shall have appropriate experience in breeding or rearing of farm animals
- The entrepreneur will be responsible for arrangement of land of suitable size and location. At least having ownership/lease deed of suitable size of land to house 200 animals and its followers. Entrepreneurs in North Eastern and Hilly States shall be having ownership/ lease deed of suitable size of land to house 50 animals and its followers.
- Any individual/ organization **availing** loan facility under Animal Husbandry Infrastructure Development Fund (AHIDF) for establishment of breed multiplication farm would also be allowed

- to obtain subsidy under breed multiplication farm.
- Entrepreneur will make its own arrangement for procurement of feed and fodder as per requirement of the farm.
 - The entrepreneur will establish breed multiplication farm of atleast 200 milch cows / buffalo and using latest breeding technology for continuously upgrading stock in States other than North Eastern and Hilly States. Entrepreneurs in North Eastern and Hilly States will establish breed multiplication farm of atleast 50 milch cows/ buffaloes and using latest breeding technology for continuously upgrading stock.
 - The entrepreneur may make available 116 elite female calves to farmers on cost basis out of 160 calves born at the farm. Entrepreneurs in North Eastern and Hilly States may make available atleast 20 female calves to farmers on cost basis. Sex sorted semen and IVF technology will be used by the entrepreneur for production of female calves. Remaining female calves may be used for replacement of the stock available at the farm
 - The entrepreneur will make available high yielding heifers/ pregnant heifers/cows to the farmers / small entrepreneurs interested on cost basis. The entrepreneur will also guide farmers on animal nutrition, vaccination, disease testing, maintaining bio-security etc and also provide veterinary aid to the farmer.

4. Funding pattern:

- i. Each entrepreneur will be provided as one time assistance from Central Government for establishment of breeder farm @ 50% of project cost upto Rs 2 crore. Each entrepreneur in North Eastern and Hilly States will be provided as one time assistance from Central Government for establishment of breeder farm @ 50% of project cost upto Rs 50 lakh. The other 50% should be managed by the beneficiary by obtaining loan from scheduled banks/ any other financial institutions like NCDC etc. Loan period, margin money and collateral may be as decided by the financial institution. Self financing shall be allowed subject to the condition that subsidy shall be released by NDDDB after ascertaining there is investment from beneficiary side as mentioned in the DPR and strictly on the basis of progress made in implementation of the project
- ii. The capital subsidy will be provided for the cost of housing, procurement of breeding animals along with transportation & insurance cost, equipment
- iii. /machines in the form of capital cost (except land).
- iv. The subsidy will be routed through NDDDB.

5. Implementing Agency and Fund Flow Mechanism:

Project will be implemented through NDDDB as implementing agency of the project. Subsidy will be released directly to in the beneficiary loan account through NDDDB.

6. Project Approval and Monitoring:

- NDDDB will float expression of interest for submission of the project as per guidelines of the scheme.
- Entrepreneur will formulate bankable proposal as per guidelines and submit proposal directly to NDDDB. Entrepreneur will also tie up with bank/financial institution for obtaining 50% of the project cost as loan.
- On receipt of such proposals from entrepreneurs a committee constituted by Implementing Agency

- (NDDDB) will screen all the application for eligibility.
- Eligible projects will be recommended by Implementing Agency (NDDDB) to concerned bank/ financial institution for loan sanctioning.
 - Implementing Agency (IA) will obtain proof from the bank/ financial institution that loan amount is sanctioned to entrepreneur and submit project for approval of DAHD.
 - First installment of the 50% of the subsidy amount will be released after approval of the project by DAHD and **after bank/financial institution releasing 1st tranche in to the loan account of entrepreneur.**
 - After the receipt of the report from Implementing Agency that full infrastructure is in place and animals have been inducted **another 25% of the subsidy amount will be released.**
 - **After receipt of report from Implementing Agency that births of 10% calves have been completed at the farm, the remaining balance 25% of the subsidy amount will be made available to entrepreneur.**
 - The assets will be monitored through GIS tagging. The State Government will be advised for physical monitoring of beneficiaries at regular interval.

Total Project Cost:

Amount of Rs 4.00 crores will be required for establishment of breed multiplication farm with the capacity of 200 milch animals. Therefore, maximum subsidy will not exceed Rs 2.00 crores. In NER and Hilly States amount of Rs 1 crore will be required for establishment of breed multiplication farm of atleast 50 animals. Therefore maximum subsidy will not exceed Rs 50 lakh.

MODEL PROJECT:

Technical Programme:

200 cows/ buffalo of high yielding preferably of indigenous breeds will be inducted at the farm. Animal of indigenous breeds like Gir, Sahiwal, Red Sindhi, Tharparkar etc in case of cattle and like Murrah, Mehsana, Banni, Jaffarabadi, Nili Ravi etc in case of buffaloes) will be purchased from the breeding tract. Indigenous animals shall be yielding more than 3000 kgs per lactation (standard lactation yield). Exotic animals yielding more than 8000 kg per lactation in case of HF and 5000 kg per lactation in case of Jersey shall be allowed to be maintained. Crossbred animals shall be yielding more than 5000 kg per lactation in case of CBHF and 4000 kg in case of CB Jersey.

Animals will be inseminated with sex sorted semen preferably of progeny tested bulls with dams lactation yield above 4000 kgs in case of indigenous cattle/ buffalo breeds. Semen straws will be purchased from different semen stations in the country.

Farm may use IVF technology and implant embryos of indigenous cattle/buffalo breeds with high yielding potential. In embryo production donor of indigenous cattle/buffalo breeds may be yielding more than 4000kg and semen may be from indigenous cattle/buffalo bulls with dams lactation yield above 4000 **(in case of Kankrej more than 3000 kg and in case of Tharparkar more than 3500 kg)**. Bulls used in embryo production preferably progeny tested/ genomically tested.

About 140 female calves and 15 male calves will be born at the farm annually. 20 female calves from the elitist of elite dams will be retained at the farm for replacement of the herd @ 20% per annum. About 116 female calves would be sold to the farmers in the region.

Animals will be tested annually for Tuberculosis, Johnes Disease (JD), and Brucellosis and positive

animals will be removed from the herd. Herd will be declared free of above

diseases. The animals will be vaccinated against FMD (six month interval), HS (annually), BQ (annually), and Theileriosis (once in lifetime in case of exotic/crossbreds). However, the vaccination against the bacterial diseases will be done only if there is an outbreak or prevalence of a particular disease in the State. Exotic animals will also be tested for genetic disorders.

SOURCING OF ANIMALS:

Pure bred animals of indigenous breeds will be procured from breeding tract. Animals will be selected on the basis of the dams performance (breeding value, lactation yield & milk fat %) and sires' information. CHRS units will help the entrepreneur in procurement of animals.

Marketing support to entrepreneur

NDDDB will provide support to entrepreneur in marketing of milk and heifers produced at the farm

Indicative cost of model project for establishment of Breed Multiplication Farm

S. No	Particulars	Total Cost for BMF of 200 animals (Rs in lakh)	Total cost for BMF of 50 animals in NER and Hilly States (Rs in lakh)
1	Purchase of cows in first lactation/2nd lactation	200	50.00
2	Construction of cow sheds 10 sq meter per cow (sheds to house 200 cows and its followers)	100	30.00
3	Construction of isolation shed	2.5	0.00
4	Administration block	20	6
5	Feed & fodder store room	40	10
6	Tractor with agriculture implements	10	
7	Dairy equipments (BMC, stainless steel Milk cans, digital milko tester, deep freezer etc)	5	3.00
8	Shed for Agri implements	22.5	0
9	Chaff cutter (electric)	1	1
	Total	401	1.00

Entrepreneur may be allowed to maintain herd of exotic/ crossbred. However may use IVF technique to produce calves with high genetic merit of indigenous breeds.

MULTI PURPOSE AI TECHNICIANS IN RURAL INDIA (MAITRIs)

Introduction

Artificial insemination is important tool for enhancing milk production and productivity of bovines. After making several efforts AI coverage in the country is still limited to 30% of the breedable bovines and 70% of the breedable animals are covered through scrub bulls of unknown genetic merit. In developed nations 100% of the bovine population is under Artificial insemination coverage.

One of important impediment in extending AI coverage in the country is shortage of trained AI technicians. For effective AI coverage about 2,02,469 AI technicians will be required against this 1,16,586 AI technicians are available in the country leaving a gap of 90958 AI technicians.

The primary focus of the project is to enhance productivity of existing bovine population by increasing Artificial Insemination coverage through establishment of Multi Purpose Artificial Insemination Technicians in Rural India (MAITRIs) to deliver artificial insemination services at farmers doorstep on self sustainable basis through collection of cost of goods and services. Benefit of the project directly accrue to 90958 educated rural youth and about 8.12 crore farmers engaged in dairying will get indirect benefit in terms of increased productivity and milk production.

2. Objectives:

- i. Provide quality training to educated rural youth to deliver artificial insemination services and veterinary first aid at farmers' doorstep on self sustainable basis.
- ii. Enhancing AI coverage from 30% to 70% of the breedable bovine females in a time bound manner;
- iii. Establishment of AI technicians through provisions of AI equipments/consumables after training

3. Establishment of MAITRIs:

3.1 The project will accomplish training of MAITRIs through existing AI training institutes already accredited by Central Monitoring Unit of DAHD with State Animal Husbandry Departments, Dairy Cooperatives, reputed NGOs (BAIF and JK Trust) and National Dairy Development Board (NDDB). Minimum requirement for training institute is at Appendix-I

3.2 The Veterinary Universities (13)/ Veterinary Colleges (41) managing large breeding farms and sufficient number of animals for practical training may also be allowed to conduct training.

3.3 After training AI technicians will be established as MAITRIs in their respective Gram Panchayats by providing AI equipments and maintaining regular delivery of AI consumables in the form of semen doses and liquid nitrogen.

4. Target Segment/ Beneficiaries

4.1 The project will create direct employment opportunities for 90980 eligible educated rural youth.

4.2 Eligibility criteria for selection of trainee:

4.2.1 MAITRIs shall be chosen from unemployed educated rural youth so as to generate employment. These workers will be chosen from the local area, as they know the area and utility of the timely AI

service. Pashu Sakhis established under DAY NRLM may also be selected by the States for training and established as MAITRIs

4.2.2 Minimum education qualification: 10th Pass and minimum age for AI workers may be fixed at 18 years by IA.

5. Curriculum and Standards:

5.1 Curriculum

MAITRIs will be trained using uniform training module developed and approved by DAHD. IA/AITI will obtain approval of DAHD for making changes in the approved syllabus if any. Detailed curriculum is given at Appendix-II.

5.2 Duration of Training:

5.2.1 MAITRIs shall be trained at the accredited training institutes for duration of 3 months (1 month classroom training and 2 month practical training). During the training regular test and exams will be conducted by AITI at regular interval.

5.2.2 MAITRIs proposed to be established under RGM by IAs/PIAs will be multipurpose workers along with AI they will take up:

- veterinary first aid,
- vaccination,
- agent for livestock insurance,
- ration balancing,
- milk recording,
- data entry in national database,
- agent for distribution of fodder seeds root slips and stem slips etc.
- Demonstration on feed management, health management breeding management will also be conducted through MAITRIs under RGM

5.3 Mobilization of Candidates:

A committee shall be constituted by District Veterinary officer of the concerned state for selection of the candidates as per requirement in the district. Preference will be given to local educated unemployed rural youth especially of dairy farmers registered under co- op societies and migrant workers returning home. Gampanchayats will be involved at all stages in the selection of trainee. Only candidates interested in working as MAITRIs will be selected.

5.4 Registration of Trained MAITRIs

After completion of training, certificate and Registration Number will be issued to MAITRIs by the concerned training institute. All the MAITRIs with AI service providers will be registered by the concerned State Animal Husbandry Department.

The MAITRI ID card shall have following: Registration No. : starting with state code (two alphabets as used in vehicle number) /AITI code (3 alphabets) /F or R (F for Fresher and R for existing AIT who has attended refresher training)/five digit serial number (unique serial no. for the AITI) e.g.HR/ROH/F/00001

means MAITRI of Haryana State trained at accredited AI Training institute at Rohtak in Fresher Training on AI with serial number of 00001.

- Passport size recent coloured photo
- Name
- Father's Name
- Date of Birth
- Date of attending last fresher or refresher training program
- Expiry date (based on due date for next refresher training)
- Aadhar Number
- Blood Group
- Present Address

All the MAITRIs working in the State will be registered by the State Animal Husbandry Department.

5.5 Retraining/Refresher training of MAITRIs

If MAITRIs are found to be deficient in their skill, then they will be retrained at accredited training institutes for duration of 5 days. All MAITRIs will be retrained after every 3 year for duration of 5 days at accredited institutes.

6. Payout Package

6.1 Cost of Training

The cost of the training to be Rs 31,000/trainee for a minimum batch size of 30 trainee / batch with duration of training of 90 working days. The training includes 1 month classroom training programme and 2 month practical training programme. The training cost per trainee will also include lodging and boarding of trainee, strengthening of training centre, consumables and printing of training modules in local languages. The breakup of the cost of training is given in the following table:

Item wise cost of training for a batch size of 100 trainee

S. No.	Item	Cost (in Rs)
1	Cost of training /Training Fee, including training manual, MSP and SOP for AI, consumables, slaughter house organs, management of farm, books and other documents	20, 000/ Trainee
2	Hostel fees	3000/ Trainee
3.	Miscellaneous expenditure including management of library, strengthening training centre, water supply, electricity supply etc.	2000/ trainee
4.	Boarding grant for 1 month	Rs 6000/-
	Total	31000/ Trainee

6.2 Placement support for MAITRIs:

After completion of training AI workers will be established as MAITRIs under the scheme. Equipments costing Rs 50,000 per MAITRIs will made available. Item wise cost per trainee is given in the following table:

S. No.	Item	cost /Trainee
1.	Portable 3 lts biological cryocontainer with canisters and goblets	Rs 8000/ AIT
2.	Mother Cryocontainer @ 1 per 5 AI technicians; Rs 25000/container	Rs 5000 / AIT
3.	AI kit (digital AI gun, straw holding forcep (tweezers), deep stick, straw cutter, thermos flask, digital unbreakable thermometer, Gum Boots, Apron, cap, kit bag, Gun holder, sheath holder, scissors, castrator, trevis etc) and tapering grant for 1 year @1500 PM	Rs 32000 / AIT
4.	Transport cryocontainer @ 1 per 5 AI technicians Rs 25000/container	Rs 5000 / AIT
	Total	50,000/ AIT

6.3 Post Placement support to MAITRIs:

6.3.1 Incentive admissible under Nationwide AI programme will also be made available to MAITRIs proposed to be established under the project.

6.3.2 Placement: After training MAITRIs are established as private AI technicians and free to collect cost of goods and services made available to farmers.

7. Fund Flow under the project:

The funds will be released directly to the Implementing Agency to make payment to the PAs on the basis of targets set under the project and achievements made by PA. It will be the responsibility of IA to submit utilization certificate and MPRs to DAHD.

8. Monitoring:

8.1 State Implementing Agency/ Livestock Development Boards will constitute Technical Project Monitoring Committee (TMC) headed by Principal Secretary /Secretary State Animal Husbandry Department. Meeting of TMC will be organized after 3 month.

8.2 State will use Management Information System (MIS) to submit reports viz. Monthly Progress Report (MPR), and Quarterly Progress Report (QPR) to Government of India as per prescribed formats, within the stipulated time frame.

8.3 DAHD will depute its officers for monitoring of the project at State level.

8.4 Monthly progress reports and quarterly progress reports will be obtained from IA

8.5 Account of IAs will be open to monitoring under Rashtriya Gokul Mission

8.6 Third party evaluation of the project by an independent agency

8.7 Activities undertaken by MAITRIs will also be monitored through use of Pashu Sakhis

9. Evaluation and accreditation of AI training institutes:

AI training institutes with the faculty and facility as per MSP and SOP as prescribed by DAHD will be identified by IA and IA will conduct training immediately after identification.

10. Registration of MAITRIs with AI service providers

MAITRIs will be registered and brought under the control of the AI service provider who will monitor performance of the AI worker, ensure maintenance of breeding records and recommend further re-training of the worker if the skills attained are not adequate.

Online Monitoring

Data on AI carried out by MAITRIs will be uploaded on INAPH data base. Performance of MAITRIs working in the field will be assessed by IAs through INAPH data base.

Required Standard Facilities at AI Training Institute

1. Class room facilities:

For a batch of 30 trainees, there should be a class room having minimum of 400 square feet area. If there are more than 30 trainees, there should be an additional class of 400 square feet area.

A laboratory having minimum 500 square feet area for practical classes is required. This laboratory should have facility to store reproductive organs, keep different models of animals and reproductive organs and space to keep semen and liquid nitrogen storage containers.

There should be a library and reading room having books and journals on cattle, breeding, indigenous breeds and dairy.

2. Teaching aids

The class room must have the following:

- Adequate chairs and tables for trainees
- White board
- LCD Projector
- Computer
- Charts and Models
- The centre must have the required quantity of semen doses and LN storage containers, AI guns, and required AI accessories.
- Reproductive organs must be obtained from a nearby slaughter house for palpation and passing a gun.
- Ear tags and ear tag applicators
- Measuring tape for estimation of body weight
- ICT aids (Computer, note books or PDAs, printers etc.,

3. Animal housing facilities for practical training

- For practice, the centre should have minimum one animal for six students.
- The centre may have its own animals for practical classes or tie up with nearby Gaushala or Panjarapol or slaughter house for practical training. Every trainee must pass AI gun in at least 20 animals during entire period of class room training.
- If the centre has its own animals, there should be a proper shed, a Trevis /an AI crate and a godown to store feeding material. Animals should be replaced every six months.

4. Lodging and boarding facilities for trainees

- The centre should have proper residential facilities for trainees including kitchen and minimum recreational facilities.
- The AI training Institutes may outsource the board and lodging facilities to an external agency through a formal agreement for at least a period of two years. The copy of the formal agreement should be kept for record for requirement at the time of Accreditation process.

5. Understanding with AI service providing organisations for practical training

- The Centre should have some formal arrangement with AI service providing organisations for its trainees to receive apprenticeship training for 60 days.
- During practical training each trainee should do minimum 75-100 AIs and the same numbers of P.D.s. The AI Centers having such work performance should be selected for apprenticeship training. The trainer of A.I. Technician should have enough experience (3 to 5 years) to impart practical training to trainee A.I. Technicians.
- Trainees should also get opportunities to address farmers meetings to develop confidence and do extension activity effectively.

6. Records/Documents for a AI training Institute

1. Trainees' records of registration
2. Trainees' daily attendance record
3. Records of successfully completed trainees
4. Summary of feedback obtained from trainees
5. Annual progress report / Training Brochure (optional)

Curriculum and course content for AI technician training

A. Duration of training

1. AI basic training:
 - Class room training along with practical training: 30 days
 - Practical training in the field with AI service provider: 60 days
2. AI refresher training:
 - Class room and Practical training -- 7 days

B. Admission norms:

1. AI Basic Training:

The participant of this programme should have at least passed in 12th standard examination with not less than 18 years of age.

2. AI Refresher Training:

The participant of this programme should be a practicing AI technician having at least 1 year relevant work experience and should have undergone AI Basic training.

C. Class Room:

1. Different breeds of cows and buffaloes and their production and reproduction parameters
2. Conservation and development of indigenous breeds through selective breeding.
3. Benefits of Crossbreeding and genetic improvement of dairy animals
4. The existing State Breeding Policy and its enforcement.
5. Introduction to AI, and its importance, role of AI in genetic upgradation across nations, Natural Service (NS) vs AI, advantages and limitations.
6. External and internal body parts of a dairy animal and their function
7. Male reproductive organs & their functions
8. Semen, its collection, evaluation, processing, preservation
 - different types of semen packing,
 - structure of mini and medium straws
 - information printed on straw and its importance
 - Breed wise Straw colour codes
9. Female reproductive organs & their functions
10. Oestrus cycle:
 - Internal and external symptoms at different stages of oestrus cycle
 - Correct time of insemination
 - Determinants of first AI in heifers
 - Methods of heat detection in cattle and buffaloes

11. Normal reproductive cycle
12. Puberty, Maturity, Breeding, Fertilization, Implantation, Gestation and Calving
13. Ideal calving interval
 - Service period, dry period and Inter-calving period
14. Process of insemination:
 - Collecting History
 - Standard Operating Procedure (SOP)
15. Importance of:
 - Proper method of semen withdrawal from container
 - Proper thawing
 - Proper preparation of AI gun
 - Proper site of semen deposition
 - Care of animal during & after insemination
16. AI equipment and accessories & their care
17. Liquid nitrogen handling:
 - Structure of LN container
 - Handling & care of LN container
 - Precaution in handling of LN
 - Different models of LN containers
 - Importance of maintaining cold chain and LN refilling schedule.
 - Proper LN level in container & its checking. Evaporation rates and refilling interval of commonly used containers in the field under normal working conditions.
 - LN conservation measures
18. Pregnancy Diagnosis
19. Methods of calculating conception rates and factors affecting conception rates
20. Method of drying of animals on completion of 7th month pregnancy.
21. Common reproductive disorders/ diseases, repeat breeding, causes of abortion, etc.
22. Measures to obtain maximum fertility
23. Ear tagging , importance of record keeping, recording formats and submission of records into the INAPH application(offline & online versions) through
24. PDA/Netbook/Desktop (training in data entry with dummy data on test server, different flash messages, saving the data, synchronization of data with the server and using action reports in day to day work.
25. Starting an AI centre
26. Method of non-surgical castration
27. Care and management of new born calf and heifers till it becomes pregnant at farmers perception.
28. Care and management of Dry Pregnant animals
29. Care and management of animals before and after calving, precautions at the time of calving and use of naval kit for disinfection of naval cord

30. Importance of Animal housing and general management in getting full expression of genetic capability
31. Importance of bio-security measures to be adopted during AI.
32. Economically important diseases and their prevention through timely vaccination; various available vaccines; vaccination schedules; importance of maintaining cold chain
33. Basic aspects of nutrition and concept of Ration Balancing
34. Importance of proper nutrition including feeding of vitamins and mineral mixtures and deworming in fertility management with emphasis on the adverse impact of macro and micronutrients deficiencies on fertility status/reproductive health of animal.
35. Vaccination schedule for FMD, HS, BQ, Brucellosis and Anthrax (in Karnataka and Assam)
36. Veterinary first aid
37. Hygiene clean milk production and prevention of mastitis
38. Importance of Animal Insurance; various insurance schemes
39. Various government schemes in the dairy sector: RGM, NPDD.

D. Case Studies

1. Advantages of AI over natural service.
2. Advantages of following SOP for AI-better conception rate and its impact over a period of five years.
3. Record keeping and using INAPH.
4. Extension activities related to animal husbandry (activities on Breeding, Health and Nutrition).
5. A farmer coming to AI Worker with an animal for insemination with following history of oestrus:
 - 3rd day after heat,
 - On the day of full moon
 - Just on the time of starting of heat
 - Animal with pustular/watery/bloody vaginal discharge.
 - Gestational heat
 - Post partum heat after one month of calving.
 - Heifer in heat with lower body weight.
6. Care of young calves till its pregnancy
7. Effect/impact of good AI technician Vs inefficient AI technician
8. Superstitious believes Vs Scientific method of breeding
9. Any new case study relevant to the case study as approved by Principal of the concerned AITI.

E. Audio Visual materials:

1. Animal reproduction and AI
2. Changing lives
3. DO and DONOT of AI
4. Hygienic milk and milk product processing and packagining
5. Year round fodder production
6. Animal health care (Diagnostics for control and eradication of diseases – FMD, HS, PPR, and avian diseases)

7. Improving quality and utilization of poor quality roughages
8. Mineral mixture for increased animal productivity
9. Organic farming for sustainability and profitability
10. Any other material relevant to the course content as approved by the the Principal of the concerned AITI.

F. Practical

1. Identification of different female reproductive organs on morbid Genitalia
2. Palpation of female genitalia in a Phantom box and passing of AI gun
3. Structure of LN container:
 - different models
 - handling & care
 - checking LN level
4. AI equipment & accessories:
 - handling & care including sterilisation
5. Palpation of female genitalia in live animal
6. Passing of AI gun in live animals
7. Demonstration of:
 - proper method for withdrawal of straw from containers
 - proper thawing procedure
 - proper preparation of gun
 - correct site of semen deposition
8. Pregnancy diagnosis at 90 days & beyond
9. Ear tagging
10. Record keeping and INAPH

G. Study visits

Study visits to any of the following places within/outside the State as deemed appropriate, by the AI training Institutes:

- AI Centre
- Cattle Feed Factory(optional)
- Dairy Farm
- Exhibitions and Krishimela/Pashumela (optional)
- Semen Station
- Dairy processing plant
- Fodder farm/Demonstration farms

H. Faculty profile and requirement (for a batch size of 30 trainees)

1. Veterinary Officers:

Minimum two Veterinarians are required with educational qualification of BVSc & AH and 3 years of

work experience in AI, Breeding, Health and Management of Cows and Buffaloes along with experience in providing on the job practical training and delivery of lectures.

2. Support Staff:

Minimum one support staff is required with graduation in any discipline

I. Tests during Training:

Class Room Training:

- Fortnightly written test on topics covered.
- Final written test at the end.
- Final practical test to evaluate the skills learnt

J. Pass marks:

- Minimum three theoretical tests and one practical test may be conducted.
- Minimum 50% in each of the test including the final tests.4

Nationwide AI programme

1. Objectives

The programme will be implemented with the following objectives.

- a. Delivery of quality artificial insemination services at farmers doorstep in districts with less than 50% A.I coverage.
- b. Enhancement in milk production and productivity of bovines thereby increasing farmers income.
- c. Better acceptability of artificial insemination services among farmers through implementation of organized farmers awareness programme

2. Area of Operation and Duration of Project:

2.1 The component will be implemented in 607 identified districts having less than 50% A.I coverage from 2021-22 to 2025-26 over a period of 5 years covering around 300 lakh breedable bovine females annually.

2.2 Saturation of the selected village will be ensured by covering all available breedable bovines through Artificial insemination under the programme. Artificial insemination services will be made available free of cost at farmers doorstep under the programme

2.3 District should ensure that all the breedable bovines available in the selected villages are covered completely under the programme. Short listing of villages shall be done based on the breedable bovine population of the villages as per the 20th Livestock Census.

2.4 In case of Hilly States, North Eastern States and Union Territories (Himachal Pradesh, Uttarakhand, Union Territories of Jammu and Kashmir and Ladakh), the programme will be extended to all villages and to all districts.

2.5 Every selected village has to be allocated separate A.I worker/ MAITRI so that 3-4 AI per A.I worker/day is done and every district achieves **900-1200 A.I per day**.

2.6 The selection of districts will be based on the A.I Coverage data made available by the States during 2019-20. All breeds of cattle and buffaloes will be covered under this programme. Monitoring of the project and follow-up of all the animals covered under the programme shall be continued till calves born.

3. SELECTION OF VILLAGES:

All breedable bovines available in all the villages of the district shall be covered through free Artificial Insemination service thereby, ensuring complete saturation of the whole district under the programme. Special emphasis to be given to those villages, which were not covered so far under NAIP Phase I & II.

Selection of districts is based on the A.I Coverage data made available by the States during 2019-20. All breeds of cattle and buffaloes will be covered under this programme. Monitoring of the project and follow-up of all the animals covered under the programme shall be continued till calves born.

For better implementation of the scheme, the scheme shall also be included under District Development Coordination and Monitoring Committee (DISHA).

4. Funding Pattern:

The component will be implemented on 100 % grant in aid basis.

5. Implementing Agencies:

5.1 The programme will be implemented by Implementing Agencies (IAs) such as State Livestock Development Boards, Milk Federation etc. Funds will be released directly to the Implementing Agency (IA).

6. Action Plan:

6.1 All available eligible breedable bovines will be covered through artificial insemination in selected village.

6.2 Participating farmers' low producing Indigenous cows should be upgraded with the semen of High yielding Indigenous Breed bull (selective breeding) with the Minimum Standards (MS) of above 3000 Kgs. Non-descript cows either may be upgraded with the semen of high yielding Indigenous breed (grading up) meeting above mentioned defined minimum standards or using semen of exotic breeds (Cross breeding) with minimum lactation yield above 10000 kg in case of HF and 7,000 kg in case of Jersey. Crossbred cows may be upgraded with the use of semen of high yielding crossbred bulls (interse mating) with dams lactation yield in case of CBHF of above 6000 kg and in case of Jersey dams lactation yield above 4000 kg as per the State breeding policy. Further, indiscriminate cross breeding shall be avoided by adhering to the notified State breeding policy.

6.3 Non descript buffaloes should be upgraded with the semen of high yielding buffalo bulls like Murrah/ Nili Ravi/ Mehsana/ Jaffarabadi with minimum lactation yield above 3000 kgs as per the State breeding policy and descript buffaloes may be upgraded through selective breeding using HGM bulls of the particular breed.

6.4 In villages where co-operative societies are available, A.I shall preferably be done through Dairy Cooperative Societies (DCS)/ through cluster AI centres of dairy co- operatives.

6.5 Though 3 A.I's are allowed per animal, in case of animals conceived with a single/ double AI, the rest of the semen doses shall be used for additional animals (Cattle and Buffalo).

Procurement of Breeding Inputs:

6.6 The semen doses for the programme shall be procured by the concerned State Implementing Agency as per the Standards and specifications in the form of Minimum Standard Protocols (MSPs)/ Standard Operating Procedure (SOPs) formulated by Government of India.

6.7 Standards for Selecting Semen: High Yielding Indigenous breed (HYIB) semen to be used should meet the standards and specifications prescribed in MSP for semen production and dams lactation yield should not be below 3000 Kgs/lactation. For semen of HF and Jersey, MSP shall be of 10,000 Kgs for HF and 7000 Kgs for Jersey respectively. For Buffaloes, in case of non- descript buffaloes, semen of Murrah/ Nili-Ravi with MSP of 3000 Kgs and above may be used, as it is easily available. For descript buffaloes, minimum MSP as decided by Government of India should be used. All purchases of semen should be from the 'A' graded Semen Stations accredited by Central Monitoring Unit (CMU) only.

6.8 Sire Directory or Details of Bulls whose Semen is used for A.I – Concerned IA shall make relevant available copies of sire directory in regional languages to the A.I technician giving details of Bull identification number, Dam's lactation yield/ Breeding value, fat % including the photograph of the used

bull. The A.I technician shall make this information available to the farmer and after performing A.I, the empty straw shall also be made available to the farmer, who can check it through Sire Directory available on e-pashuhaat.

Training:

6.9 Trainers' trainings on data uploading on INAPH data base have already been completed in the States. Training of all the A.I technicians shall be organized with the help of these TOT's again in every district, where District Animal Husbandry Officer (DAHO)/ District Veterinary Officer (DVO) should also update them on technical aspects of A.I.

6.10 A.I technicians village wise shall be ear marked by the District Coordination team and their name and mobile number shall be made public for use of farmers.

6.11 The AI technician shall perform AI following SOPs formulated by Government of India. Copy of Standard Operating Procedure (SOP) for AI shall be made available to AI technicians.

Tagging:

6.12 All the animals covered under the programme shall be identified using AUID and their data shall be uploaded on INAPH data base. After AI, the animal shall be followed up for pregnancy diagnosis till calf born and all the events shall be recorded by the AI technician on the data base.

Parentage Testing:

6.13 Parentage testing shall be done @ 100 calves/district for of the calves born under NAIP III @ testing cost of Rs. 3400/- (testing has to be done for both dam and calf @ Rs.1700/- as testing fee for each sample of dam and calf).

Data Uploading on INAPH:

Procedure for uploading of data:

6.14 The technician has to open the INAPH LITE application, on INAPH database.

6.15 He has to enter his user ID and password (provided by NDDB to IA).

6.16 He has to fill up the registration form on Animal Details. He has to fill all the fields compulsorily (Stepwise format attached at Annexure III). Wherever boxes are provided, he has to enter the numbers or ✓ marks or option to be chosen from dropdown list).

6.17 After filling up animal registration, he has to fill up details of the owner of the animal.

6.18 Once registration of animal and owner is over, he has to fill up details on A.I under A.I transaction.

6.19 After 3 months of insemination, he has to fill up the result on pregnancy diagnosis whether the animal has become pregnant or not.(✓)

6.20 After an approximate period of 10 months, he has to enter the data on details of calving.

6.21 If tablets are not available, data entry sheets have to be printed and supplied to the A.I technicians by the concerned IA's. AI technicians shall record information on the data sheet and shall either themselves upload the data through their mobiles or shall submit to the officer designated by District authorities for uploading of data on INAPH database.

6.22 Data uploaded by AI technicians / District/Block level with desktop facility on INAPH data base may be used for online monitoring of the project activity.

Data Reporting of Progress on INAPH:

6.23 Daily reporting of village wise and district wise progress on the No. of AI done shall be done by the concerned DAHO on INAPH data base so as to provide public scrutiny/ assessment of the programme. Reports on follow-up on the A.I done, that is Repeat A.I, Pregnancy diagnosis after a period of 3 months of A.I and calves born details after gestation period (280 days in case of cows and 310 days in case of buffaloes) of AI shall also to be uploaded on INAPH. The DAHO shall ensure that the progress is uploaded for all activities related to A.I on INAPH immediately, to ensure that the data made available is on real time basis.

Farmer Awareness:

6.24 At village level: Display board should be placed in every selected village indicating that all the eligible female bovines (cattle and Buffalo) in the village are covered under NAIP through free AI service at farmers doorstep.

6.25 Banners should be displayed in prominent places and also at sites where A.I is done. Village wise details of AI technicians shall be shared by State and same detail will be displayed in each village through wall paintings, posters etc.

6.26 Village wise details of AI technicians shall be shared by State and same detail will be displayed in each village through wall paintings, posters etc.

6.27 At district level: A fund of Rs.5 Lakhs per district has been made available for publicity at village and district level (wall writings, banners), storage and transportation of semen doses, AI consumables and monitoring. Leaflets in regional language should be prepared by the concerned DVO on the following and to be distributed compulsorily to all the farmers for creating awareness.

- Benefits of A.I over natural service
- **Detection of heat**
- Regarding the information printed on the semen straw -bull No., Breed, MSP etc
- Advantages of high yielding semen for enhancing the productivity.
- Management of cryo containers and liquid nitrogen
- Expected date of pregnancy diagnosis
- **Creating awareness among farmers to ask for the empty straw from the A.I technicians after A.I is performed, to know about the details of semen used for A.I and about the bulls.**

6.28 Public Participation: Member of Parliament along with Member of Legislative assembly shall be invited for the inauguration programme. The programme shall be organised to create wide publicity in a simple manner.

6.29 At State level: For creating awareness about the programme at State level, Rs.5.00 lakh has been made available for printing of A.I formats, preparing and broadcasting of Radio jingles on the importance of A.I, organising awareness camps and Publicity through Television.

7. Monitoring of the Programme:

7.1 District level: At the district level, scheme shall be monitored by the District Monitoring committee

headed by Collector/District Magistrate, Member secretary – DAHO and the Implementing agency, which will hold weekly review meetings ascertaining the progress of the programme, with special reference to AI technicians in the selected villages and the media campaign launched in local language to make the farmers aware of the programme.

7.2 State level: State Animal Husbandry Department shall constitute a State Monitoring Committee headed by the Principal Secretary of the department and its members should be Stake holders involved in AI. In each State, a nodal officer shall be nominated by the State for coordination with the centre. The State Monitoring Committee will meet weekly during the campaign. The State government may change the administrative arrangement of review but will ensure that the weekly review takes place at a level above District Animal Husbandry Officer/District Veterinary Officer and the minutes are shared with the District Collector and the Secretary In charge of Animal husbandry Department in the State.

7.3 Central Monitoring Committee Central Monitoring Committee has been constituted in the Department of Animal Husbandry and Dairying (DAHD) and regular meetings of TMC will be held on monitoring of the programme. In this regard, 3 Veterinarians and 1 Management Consultant will be hired for monitoring the AI progress. Three data entry operators will be hired on consolidated salary basis of Rs. 18000/-month.

7.4 DAHD shall depute its officers for monitoring of the programme at State level.

7.5 Call Centre at DAHD: Call centre created under NADCP programme will be utilized for NAIP to undertake concurrent evaluation of the programme.

8. Incentive Package for AI technicians:

8.1 All Incentives shall be transferred through PFMS by the State to AI technicians as per the guidelines issued by Gol.

8.2 Incentive for Tagging: An incentive of Rs.2.50 per animal will be given for tagging under NADCP.

8.3 Incentive will be made available to the private AI technician/MAITRIs @ Rs 50/ per AI and Rs. 100/- 8.4 per calf born. All incentives for private A.I technicians/ MAITRIs to be disbursed strictly based on the data uploaded on INAPH and verification of the data by the concerned District Animal Husbandry Officer (DAHO). No incentives shall be paid to government AI technicians or technicians drawing salary from Milk Federations engaged in the programme.

8.5 Additional conception linked incentive will be made available @ Rs 150 if conception achieved at 1st AI and Rs 100 if conception achieved at 2nd AI. The conception linked AI will also be made available to Government AI technicians.

8.6 In case of North Eastern States and Hilly States/Union Territories (Himachal Pradesh, Uttarakhand, Union Territories of Jammu and Kashmir and Ladakh), the incentive for private A.I technicians (Not getting salary by Government or Co-operatives) shall be @ Rs.100/- per A.I. and Rs 100 per calf born. Additional conception linked incentive as mentioned above will also be admissible to AI technicians in NER States. .

9. Measures to Ensure Quality of Goods and Services

Standards and specifications in the form of MSP's/SOP's formulated by Government of India shall be implemented in letter and spirit.

Accelerated Breed Improvement Programme -Using sex sorted semen for getting assured pregnancy

1. Introduction

1.1 With mechanisation of Agriculture, utility of male bovines have been reduced. Farmers are not willing to maintain Bullocks for agriculture or any other draft work. Hence, male calves born at farmer house have become a liability. Farmers often let the male calves loose which are resulting into increase in stray animal population. Only female calves can be produced (with more than 90% accuracy) by use of latest technology like Sex Sorted Semen in AI program. Use of sex sorted semen will be game changer for the farmers as only female calves are produced with 90% accuracy against 50:50 male to female sex ratio with normal semen.

1.2 Extensive use will increase the number of female animals thereby increasing income of farmers through sale of female or through sale of milk. Use of sex sorted semen will also reduce male cattle population thereby limiting stray cattle population in the country.

2.Objectives:

2.1 To promote use of sex sorted semen for production of female calves with 90% accuracy

2.2 To enhancing milk production and farmers income through production of female calves.

2.3 Increased availability of female calves of high genetic makeup for farmers and entrepreneurs interested in taking up dairy farming.

2.4 To make sex sorted semen technology affordable to farmers thereby increasing acceptability of artificial insemination with use of sex sorted semen.

2.5 To Create Visible demand of sex sorted semen in the country thereby attracting private entrepreneurs in production of sex sorted semen.

3. Action Plan:

Selection of semen production facility for supply of sex sorted semen:

3.1 Freight On Road (F.O.R.) rates for supply of quality sex sorted semen to Implementing Agencies/ AI technicians by sex sorted semen production facility will be discovered by NDDDB through online tendering process in a transparent manner.

3.2 All semen stations having facility for sex sorted semen production may participate in the tender. Eligible semen stations (meeting all standards and specifications) may supply sex sorted semen doses of the breeds maintained at semen stations at the lowest rate discovered by NDDDB.

3.3 Implementing Agencies (IA) will be allowed to purchase sex sorted semen doses only from the semen stations identified by NDDDB (meeting all eligibility criteria) and on the discovered rates.

Payment for sex sorted semen doses:

3.4 80% of the total Payment will be made by IA to sex sorted semen/ sexed semen production facility after quality testing of sex sorted/sexed semen straws for sperm concentration which shall not be less

than 2.1 million and post thaw motility shall not be less 50% (with not less than 1.3 million progressively motile sperms/ straw) and experts available at sex sorted semen production facility complete training/ orientation programme for AI technicians .

3.5 Additional straw shall be made available by semen production facility for testing may be at the rate of 2 straw per batch of sex sorted semen doses.

3.6 15% of the total payment will be paid after verification of conception rate in first 2000 AIs with sex sorted semen. Conception rate shall not be less than 30% in any case. In case conception rate is less than 30% the sex sorted semen production facility will replace all the straws available under storage with implementing agency.

3.7 5% of the balance payment will be made after verification of female calves born in 30% of the representative doses supplied under the programme. In any case female to male calf sex ratio shall not be less than 90:10.

Implementing Agency using its own AI network

3.8 IA will charge the farmers for getting assured pregnancy through use of quality sex sorted semen.

3.9 IA will be allowed to use only sex sorted semen produced by semen stations (meeting all eligibility criteria) empanelled by NDDDB and only on rates discovered by NDDDB.

3.10 Implementing agency may identify service provider for getting assured pregnancy by using of sex sorted semen through online tendering process in a transparent manner.

Quality parameters of sex sorted semen

3.11 Semen production facility will supply sex sorted semen with 90% sex accuracy for birth of female calves.

3.12 Semen production facility will be allowed to supply only semen obtained from high genetic merit bulls.

3.12.1 For exotic bulls: Bulls shall be progeny tested/ genomic tested with positive EBV/GEBV and dams lactation yield (ME) shall be above 10,000 kg in case of HF bulls and 7,000 kg in case of Jersey bulls

3.12.2 For indigenous bulls (Gir, Sahiwal, Red Sindhi and Tharparkar): Bulls shall be progeny tested/ genomic tested with dams lactation yield shall be above 3500 kg.

3.12.3 For CB bulls shall be progeny tested / genomic tested and dams lactation yield shall be above 5000 kg in case CBHF and above 3500 kg in case of CB Jersey

3.12.3 For buffalo bulls: Bulls shall be progeny tested/genomic tested with positive EBV/ GEBV in case of Murrah, and Mehsana and dams lactation yield shall be above 3500 kgs. In case of Nili Ravi and Jaffarabadi dams lactation yield shall be above 3500 kgs.

3.13 Sperm concentration in sorted semen straws shall not be less than 2.1 million and post thaw motility shall not be less than 50% (with at least 1.3 million progressively motile sperms/ straw).

3.14 Semen straws shall be produced as per MSP and SOPs formulated by the DAHD and semen production facility shall be graded as A by Central Monitoring Unit (CMU) of DAHD.

AI Technicians

- 3.15 IA shall select best AI technicians operating in the area for attaining higher conception rates.
- 3.16 IA will organize training or orientation programme for selected AI technicians by involving experts of sex sorted semen production facility for higher conception of rates.
- 3.17 AI technicians participating in implementation of the programme shall be registered with Implementing Agency and their profiles shall be uploaded on INAPH data base and linked to e-Gopala App.
- 3.18 Details of AI technicians engaged in implementation of the programme shall be made available to DAHO and local veterinary hospital for effective monitoring of the project activities.
- 3.19 AI technicians engaged in implementation of the programme will be supplied with sex sorted semen with unique number on each straw. Sex sorted semen production facility will be requested to use unique color for sex sorted semen straws.
- 3.20 Inventory of the sex sorted semen straws supplied to AI technician will be maintained by IA along with batch number, unique number and number of doses supplied.
- 3.21 AI technician will take photo of empty straw through his mobile after performing AI and hand over empty straw to concerned farmer. It is the responsibility of AI technician for uploading all details of AI on INAPH data base along with photo of empty straw.

Incentives to AI technicians

- 3.22 Provision of incentives to private AI technicians under the project will be at the rate of Rs 100 per AI with sex sorted semen. Additional incentives to AI technicians both private and Government attaining higher conception rates Rs 150 for conception at first AI and Rs 100 for attaining conception at 2nd AI. Incentive @ Rs 100/ calf born will also be made available to private AI technicians.
- 3.23 Incentives will be made available on the basis of verification of the data uploaded by AI technicians on INAPH data base and photo of empty straw.

Selection of Beneficiaries:

- 3.24 Scheme will be available to all the farmers interested in taking up assured pregnancy with sex sorted semen.
- 3.25 Heifers and normal cyclic cows in 1st to 3rd lactation available with the farmers may be selected and covered under the programme for getting assured pregnancy through sex sorted semen. Animals above 3rd lactation may not be covered under the programme as in this category of animals conception rate is substantially low.
- 3.26 Beneficiary will register with Implementing Agency (SLDB/Milk Federation /DAH/ NDDB (NDS)) to take benefit of the scheme.

Support to farmers available under the project

- 3.27 Support will be made available under the programme to farmers for getting assured pregnancy @ Rs 750 per pregnancy or 50% of total cost discovered per pregnancy (on average 3 doses per pregnancy) using sorted semen whichever is lesser upto 2nd year of the project and from 3rd year onwards subsidy

will be reduced to Rs 400 per pregnancy or 50% of total cost discovered per pregnancy using sorted semen whichever is lesser, as cost of sex sorted semen will be reduced substantially and balance amount of fund for getting assured pregnancy will be met by the participating farmer.

Parentage testing

3.28 At least 1% of the calves born under the programme will be taken up for parentage testing by implementing agency on random basis. Parentage testing will be arranged by NDDB.

4. Targets of the project:

4.1 Under the programme it is proposed that Sex Sorted semen doses will be used for getting 51 lakh assured pregnancies, leading to birth of 45 lakh female calves.

4.2 Concerned Milk Union/ State Animal Husbandry Department will be requested to take responsibility to provide veterinary aid to the calves born under the programme.

5. Implementation Mechanism Area of Operation

5.1 Project will be implemented in all States and UTs

Contract with farmers for getting assured pregnancy

5.2 Implementing Agency (SLDB/ DAH/Milk Federation (MU)/ NDDB (NDS)) will enter into contract with farmer for getting assured pregnancy using sex sorted semen and farmer will deposit his share of Rs 750 (during first two years of the project) and Rs 400 from 3rd year onward of the project.

5.3 Farmers will be advised to register Heifers and normal cyclic cows in 1st to 3rd lactation for covering under the programme. Animals to be covered under the programme shall be assessed by AI technician for fertility, reproductive disorders etc. Only animals with higher fertility shall be covered under the programme.

5.4 If successful pregnancy is not delivered even after 3rd AI in a cow/buffalo then entire amount will be returned to concerned farmer by IA. If male calf is born then, Rs. 500 will be returned to the concerned farmer.

5.5 AI technician shall deliver Artificial insemination service at the farmer's doorstep following MSP and SOP prescribed by experts of sex sorted semen production facility.

5.6 In any case female to male calves' ratio shall not be less than 90:10. If male calves ratio is exceeding in that case IA will not further purchase sex sorted semen doses from concerned sex sorted semen production facility and return all the doses supplied by the concerned facility available under storage with IA.

5.7 All the information that is starting from registration of animal to calving, uploading photograph of empty straw of sex sorted semen, ear tagging of calf and parentage verification shall be entered by AI technicians on INAPH system.

5.8 Parentage verification of randomly selected female calves born from sorted semen will be arranged by NDDB. In any case parentage testing error shall not exceed 10%. If parentage testing error exceeds 10% in that case IA may remove AI technician from the area.

6. Financial Implication:

The indicative financial outlay of the program:

S.No.	Particulars	Financial Outlay in Rs in crore
1	Getting assured pregnancy using sex sorted semen (Rs 750 /pregnancy during 1st and 2nd year and Rs 400/ pregnancy from 3rd year of the project)	323
2	Incentives to private AI technicians	100
3	Incentives to AI technicians on calf born @ Rs 100/ calf born	51
3	Consumables for AI@ Rs 10/ AI	15
4	Extension activities for the popularity of the Program (Rs. 10 lakh per state/year) to SIA	5.10
5	Parentage verification of randomly selected female calves born from Sexed Semen (at least 1000 female calves per state to be randomly tested for Parentage Verification) @ Rs 1700 per test	8.67
6	Monitoring of the Program-NDDDB	3.00
	Total Outlay	509

7. Implementing Agency:

7.1 The component using sex sorted semen for getting assured pregnancy will be implemented through Implementing Agencies (State Livestock Development Board/ State Department of Animal Husbandry/ State Milk Federation(Milk Union)/ NDDB (NDS). Funds will be released directly to implementing agencies.

7.2 The Implementing Agency will either implement the programme through Service Provider or through own breeding network. Funds under the scheme will be transferred directly to Implementing Agency.

7.3 The sanctioned projects under RGM for establishment of sex sorted semen production which have created the facility for sex sorted semen production will be allowed to produce sex sorted semen and may implement the project as proposed in the document. Other sanctioned project which have not created facility or in tendering stages will implement the project in the manner as proposed in this document.

8. Monitoring of the project:

8.1 NDDB

Project will be monitored by National Dairy Development Board and funds are proposed under the project for monitoring of the project activities and Parentage verification.

NDDB will be responsible for the following:

- Preparation of Operational Guidelines of the Program
- Designing system of Monthly reporting.
- Training
- Ensuring parentage verification as per guidelines of the scheme

- Organizing review meetings with IAs
- Periodic Field visits and random checking of information reported in INAPH with respect to field reality
- Periodic submission of Monitoring visit and progress reports to DAHD
- Evaluation of Projects
- Any other responsibility which arises while implementation of the programme.

8.2 Monitoring at the level of Call Centre:

Call centre established under NADCP programme will be utilized for verification of AI conducted, and female calves born under the programme at regular intervals. Information received from the call centre will be analysed and submitted to IAs to take remedial measures.

8.3 Online Monitoring of the project:

- For online monitoring all the activities of the project including identification of animals covered under the programme using Pashu Aadhar (AUID), AI using sex sorted semen, pregnancy diagnosis (after 90 days), birth of the calf, identification of calves using AUID will be uploaded on INAPH data base by AI technicians. Incentives to AI technicians will be made available on the data basis of uploaded on the INAPH data base.
- AI technician will upload photograph of empty straw of sex sorted semen immediately after AI and handed over empty straw to concerned farmer.
- Verification of information entered by AI technician on the INAPH data base by local veterinarian/ DAHO on daily basis.
- System of push and pull messages to the beneficiaries from the data base at regular interval will be evolved.
- Verification of information uploaded on INAPH data base by NDDDB at regular interval (after every 15 days).

8.4 Close Monitoring of the Project

- All the activities Project will be monitored by National Dairy Development Board as Nodal Monitoring Agency over duration of five years throughout the country.
- DAH/ Milk Federation (Milk Unions)/ NDDDB (NDS) will monitor all the activities of the project through its field level institutions dairy cooperative societies/ Veterinary Hospital/ Veterinary Dispensaries.
- Pashu Sakhis established under NRLM will be roped in for monitoring of the project at beneficiary level and creation of awareness among the farmers.
- Further, State Level Review Committee meeting will be held every month under the Principal Secretary (Dairy Development/Animal Husbandry & Dairy Development) of the concerned State to review progress of project. MD of Milk Federation, CEO of LDB, Director (Animal Husbandry), and breeding experts of State veterinary University will be its members. Joint Secretary, DAHD or his representative will attend meeting once in every quarter. Monthly progress report will be prepared by Implementing Agencies and same will be reviewed by NDDDB. All the activities related to implementation of the project shall be noted and submitted to State Dairy Development/Animal Husbandry & Dairy Development Department.

Guidelines for *National Livestock Mission*



3

Guidelines for National Livestock Mission

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Guidelines for National Livestock Mission

1. Introduction

1.1 The Department of Animal Husbandry & Dairying, Government of India is implementing the scheme of National Livestock Mission since the financial year 2014-15. In view of the present need of the sector the NLM scheme has been revised and realigned from F/Y 2021-22. The revised scheme of National Livestock Mission (NLM) aims towards employment generation, entrepreneurship development, increase in per animal productivity and thus targeting increased production of meat, goat milk, egg and wool under the umbrella scheme Development Programme. The excess production will help in the export earnings after meeting the domestic demands. The concept of NLM Scheme is to develop the entrepreneur in order to create the forward and backward linkage for the produce available at the unorganized sector and to link with the organized sector.

1.2 The NLM will be implemented throughout India in accordance with guidelines described hereunder.

2. Mission Objectives

2.1 The NLM intends to achieve the following objectives:

1. Employment generation through entrepreneurship development in small ruminant, poultry and piggery sector & Fodder sector
2. Increase of per animal productivity through breed improvement
3. Increase in production of meat, egg, goat milk, wool and fodder.
4. Increasing availability of fodder and feed to substantially reduce the demand – through strengthening the fodder seed supply chain and availability of certified fodder seeds
5. Encouraging establishment of fodder processing units to reduce the demand supply gap
6. Promoting risk management measures including livestock insurance for farmers
7. Promoting applied research in prioritized areas of poultry, sheep, goat, feed and fodder
8. Capacity building of state functionaries and livestock owners through strengthened extension machinery to provide quality extension service to farmers.
9. Promoting skill based training and dissemination of technologies for reducing cost of production, and improving production of livestock sector

3. Mission Design

3.1 The realigned National Livestock Mission will have following three Sub-Missions:

- a. Sub-mission on Breed Development of Livestock and Poultry
- b. Sub-mission on Feed and Fodder Development
- c. Sub Mission on Innovation and Extension

3.2.1. Sub-mission on Breed Development of Livestock and Poultry: proposes to bring sharp focus on entrepreneurship development and breed improvement in poultry, sheep, goat and piggery by providing the incentivization to the Individual, FPOs, FCOs JLGs, SHGs, Section 8 companies for entrepreneurship development and also to the State Government for breed improvement infrastructure.

3.2.2 Sub-mission on Feed and Fodder Development: This Sub-Mission aims towards strengthening of fodder seed chain to improve availability of certified fodder seed required for fodder production and encouraging entrepreneurs for establishment of fodder Block/Hay Bailing/Silage Making Units through incentivisation.

3.2.3 Sub-mission on Innovation and Extension: The sub-mission aims to incentivize the Institutes, Universities, Organizations carrying out research and development related to sheep, goat, pig and feed and fodder sector, extension activities, livestock insurance and innovation. Under this sub-mission, assistance will be provided to the central Agencies, ICAR Institutes and University farms for applied research required for development of the sector, extension services including promotional activities for animal husbandry and schemes, seminars, conferences, demonstration activities and other IEC activities for awareness generation. Assistance will also be provided for livestock insurance and innovations.

3.2.4. Jurisdiction of the scheme

The scheme will be implemented all over India from 2021-22.

4. Institutional Structure

4.1. Empowered Committee (EC)

4.1.1. Constitution of EC: Empowered Committee will be established under the Chairmanship of the Secretary, Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India. The other members of the committee will be Financial Advisor, DAHD, Animal Husbandry commissioner, Joint Secretaries of DAHD and Principal Secretaries of Selected States representing 5 regions on a rotational basis (North, East, West, South and North-eastern states) Representatives of the line Ministries. The Member Secretary of the empowered committee will be Joint Secretary, National Livestock Mission who will also be the Mission Director of NLM.

4.1.2. Function of EC: The Empowered Committee will be responsible for overall monitoring of the progress of the scheme, approval of the scheme guidelines, provide policy direction, and approve necessary changes if any (such as deletion, addition and modification of any component or activities) with regard to the scheme, without altering the total funding, allocation and funding pattern. The Committee will also have the power to update the cost norms of different activities as required from time to time due to variation of the price index of different commodities related to a particular activity. The EC may also delegate powers to other Committees as may be required. The EC will also have power to delegate responsibilities to the Project Approval Committee for approval of projects.

4.2. Project Approval Committee (PAC):

4.2.1. Constitution of PAC: PAC will be established under the Chairmanship of Joint Secretary, National Livestock Mission to approve the projects including the project received from the State Level Executive Committee (SLEC). The committee will comprise of Director of the concerned State Government Department, Representative of the Financial Advisor, Officials of the Line Department, Joint Commissioner or Deputy Commissioner or Deputy Secretary of NLM Division. Joint Commissioner or Deputy Commissioner or Director will be the Member Secretary of the PAC. In a situation where a meeting of PAC is not possible, Chairman of PAC can sanction the project with the condition that the project will be approved in the next PAC.

4.2.2. Function of PAC: The PAC will examine, verify the feasibility, viability of the project received from the SLEC appraised by the Project Appraisal and Monitoring Unit and recommend for release of grants.

The **PAC** will also monitor the implementation of project(s) at the ground level. The PAC will also be empowered to suggest changes in guidelines which will be approved by the Empowered Committee.

4.3 State Level Executive Committee (SLEC):

4.3.1. Constitution of SLEC: The State Level Executive Committee (SLEC) will be established under the Chairmanship of Additional Chief Secretary/Principal Secretary/ Secretary of State Animal Husbandry Department, of the respective State Governments. The convenor of the SLEC will be the Chief Executive Officer or Managing Director of the State Implementing Agency as the case may be. The other members of the Committee will be the Director or Commissioner of Animal Husbandry, Joint Secretary or Deputy Secretary of the Department, Additional Director, Deputy Director/District Animal Husbandry Officer of the concerned District whose proposals are to be considered and any technical officer in the relevant field.

4.3.2. Function of SLEC: The State Implementing Agency of the State Animal Husbandry Department will invite proposals through Expression of Interest (EOI) from eligible beneficiaries/agencies including the Entrepreneurship proposal. The SLEC will examine the project proposals submitted by beneficiaries and State agencies, for approval and will confirm the availability of State Share and beneficiary contribution if any as per the specific scheme guidelines and will forward the same to NLM division of Department of Animal Husbandry and Dairying Ministry of Fisheries, Animal Husbandry and Dairying, Government of India for consideration and approval.

4.3.3. Mentoring Group: A mentoring group will be established under the Chairmanship of Hon'ble Minister of Fisheries, Animal Husbandry and Dairying with the members from Government Sector, Retired Scientists/ professionals, experts from private sectors Livestock Farmers working in the field of Small Ruminants, Piggery and Feed and Fodder Sector. The mentor group will guide the Department for implementation of the scheme various innovations etc.

4.3.4. Expert Group: An expert Group will be set up under the Chairmanship of Animal Husbandry Commissioner (AHC) with the members from the Department, ICAR and the Relevant States to appraise the project under the Research and Innovation components of NLM Scheme. The Expert Group will examine the project submitted by the eligible institutes or organizations with regard to its feasibility, cost of the project, and technical aspect as proposed by the organization and economic benefit of the project. The Expert Group, after examination of the project, shall recommend the project for the Grants for the consideration of the Empowered Committee. The Expert Group shall also co-opt subject matter specialist in the group if need be.

5. Implementation Framework

5.1. Implementing Agency:

The National Livestock mission will be implemented through the State Implementing Agency established under the State Animal Husbandry Department. In this regard, the State Animal Husbandry Department will need to establish their State Implementing Agencies or identify the agency already established for implementation of the National Livestock Mission. The State Government shall notify the State Implementing Agency to the DAHD. The Central share wherever eligible will be channelized through the State Implementing Agency.

5.2 Function of the State Implementing Agency for implementation of NLM scheme.

- The State Implementing Agencies of the Animal Husbandry Department or the State Animal

Husbandry Department of the concerned State Government shall invite the names of entrepreneurs/ eligible entities through expression of interest.

- The applications submitted by the entrepreneurs/ eligible entities shall be scrutinized and the State Implementing Agency will recommend the application of the entrepreneurs/ eligible entities to avail balance financing for the project through scheduled banks or financial institutions like National Cooperative Development Corporation (NCDC) etc.
- Once the project funding for entrepreneurship components through financing for loan portion is committed then the same should be placed before the State Level Executive Committee (SLEC) for approval. After the approval of the projects by the SLEC, the projects will be sent to the Central Government through online portal developed for uploading applications under NLM.
- The implementing agency shall also send the proposals under the NLM other than the entrepreneurship project for seeking Central Share through online portal.
- The State Implementing Agency shall be responsible for monitoring the projects of the entrepreneurs and intimate the Department on their progress on half yearly basis. Utilisation certificate, physical and financial progress, on the other projects in respect of projects other than entrepreneurs to be furnished to the Department on half yearly basis.

5.3. Eligibility Criteria for the Entrepreneurs/ Eligible Entities to avail benefit under NLM

The Entrepreneurs/ Eligible Entities shall be considered Eligible for availing benefit under the entrepreneurship programme if fulfils either of the following criteria:

- Entrepreneurs/ Eligible Entities either have obtained training or have trained experts or have sufficient experience in the relevant field in managing and running the project or have technical experts with sufficient experience in the relevant field of managing and running the project.
- The Entrepreneurs/ Eligible Entities have got the sanction loan for project by the bank or financial institutions furnished bank guarantee from scheduled bank along with appraisal of project for its validity by bank where it is holding the account.
- The Entrepreneurs/ Eligible Entities should have own land or lease land where the project will be established.
- The Entrepreneurs/ Eligible Entities have all the relevant documents for KYC

5.4. Monitoring of the Scheme:

The programme will be monitored through MIS system for maintaining data and online monitoring. The assets will be monitored through GI tagging.

Implementation of the scheme will be reviewed at National Review Meeting, Regional Review Meeting and State Review Meeting. Further, each State will need to submit the physical and financial progress of the schemes in every quarter as per the outcome-output framework enclosed at **Appendix I**.

The DAHD will set up Project Management Agency (PMA) for assisting implementation of the scheme. The PMA shall be responsible for the following work:

- to assist the State Implementing Agency to scout the beneficiary proposal.
- to handhold the beneficiary to facilitate them to submit the proposal
- to undertake outreach of the scheme

- to maintain liaison with the respective banks for monitoring the fund flow to the beneficiary
- to develop MIS system and
- Any other work assigned by the DAHD for implementation of the scheme.

5.4.1. Transparency in scheme monitoring: For better monitoring of the scheme at the grass root level, the State shall ensure implementation of monitoring system involving the Panchyati raj institutions like the members of Gram Panchayat at the village level and PanchayatSamiti at the Block level and the District Panchayat at the district level. Also the PashuSakhis under the National Rural Livelihood Hood Mission should be utilised for feedback of the projects under implementation and functions in the field. For breed improvement, identifying resources, the PashuSakhees may also be involved.

5.4.2. Physical Progress report: The State Implementing Agency will submit the Physical Progress Report for the projects for which the Central Share has been released on quarterly basis as per the Format prescribed at Appendix 1.

5.4.3. Financial Progress report: The Financial Progress report need to be submitted as per the prescribed format of GFR within the time limit specified by GFR.

5.5. Project Approval of entrepreneurship programmes:

- The Entrepreneurs/ Eligible Entities shall submit the application through the NLM Portal to the State Implementing Agency in response to Expression of Interest issued by the State Implementing Agency.
- The applications submitted by the Entrepreneurs/ Eligible Entities will be scrutinised by the State Implementing Agency and will be recommended for sanction of loan by the scheduled Bank or financial institutions like NCDC etc..
- After the recommendation of the project, the same will be considered by the bank or financial institutions for financing.
- Once the Entrepreneurs/ Eligible Entities obtains the bank or financial institution sanction of the project, the State Implementing Agency shall place the same in the State Level Executive Committee (SLEC) for recommending the application to the Central Government. After approval of SLEC the SIA will mark the application to the Central Government through the Portal to DAHD along with uploading the sanction for the loan component.
- The DAHD shall approve the project through the Project Approval Committee and fund the subsidy amount for the approved projects through Small Industries Development Bank of India (SIDBI) to the lending Bank or financial institutions as the case may be to release the subsidy to Beneficiaries

5.6. Approval of the projects submitted by Central Agencies/ University farms etc:

- The concerned Central Agencies/ University farms will submit the proposal to the NLM division through their parent organization/ Department. The parent organization/ Department should approve and recommend the project before forwarding to the NLM Division seeking assistance.
- On receipt of such applications, Project Approval Committee (PAC) established under the Chairmanship of the Joint Secretary, NLM will approve the project depending on the feasibility and viability of the project.
- The concerned Central Agencies/ University farms need to inform the physical and financial progress of the schemes to NLM division in every quarter.

5.7. Appraisal of the projects under innovation and research & development: The projects under Innovation and Research and Development which shall be submitted by the concerned Agency / Universities/ ICAR and other credible organization shall be evaluated and appraised by the Expert Group and recommend the same for consideration for funding by the Empowered Committee.

5.8. Funding and Fund flow of the scheme

The NLM scheme is consisting of both Centrally Sponsored components and Central sector components. Funding patterns has been explained against each component. However, apart from the funding under the specific components, the Department will also provide funding to the State Implementing Agency towards administrative cost for inviting proposals from the beneficiaries, awareness creation and handholding of beneficiaries to facilitate them to get bank loan etc.

5.8.1. Fund Flow for the Entrepreneurship programmes (Central sector Component):

5.8.1.1. Fund Channelizing Agency: All the subsidy amount will be channelized through the Small Industries Development Bank of India (SIDBI). The Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying shall sign and Memorandum of Understanding (MoU) with SIDBI regarding the managing of Subsidy, transfer of subsidy to the lending bank and financial institutions. The Department of Animal Husbandry and Dairying may provide administrative cost to SIDBI for working as fund channelizing agency for the entrepreneurship programme. The SIDBI shall also be liable for submitting all information and utilization of funds transferred to them. The Department will decide the modalities for fund channelizing work with SIDBI.

5.8.1.2. Fund flow mechanism for the entrepreneurship programme: In respect of the entrepreneurship programme, the subsidy will be provided by SIDBI to the lending scheduled bank or Financial Institutions like NDCDC etc. to the subsidy account of beneficiaries. The SIDBI on receipt of the subsidy component, shall release the first instalment of subsidy to the appropriate account of Entrepreneurs/ Eligible Entities after the release of first instalment of loan. The SIDBI needs to open dedicated account for subsidy and shall intimate the DAHD for mapping in PFMS System. The manner of subsidy release has been mentioned against each entrepreneurship component.

In case of the self-financing project, the first instalment of back ended subsidy will be provided by SIDBI to the lending scheduled bank where the beneficiary has account. Such self-financed projects, prior to its sanction, would also be appraised by the Bank where the Entrepreneurs/ Eligible Entities has the account. The first instalment of subsidy will be released only when the beneficiary has made expenditure of 25% cost for the project towards infrastructure and has been verified by the State Implementing Agency. Remaining amount of subsidy will be provided after completion of the project and verified by State Implementing Agency.

The beneficiaries interested in taking benefit under the entrepreneurship project in self-financing mode need to provide Bank Guarantee from the scheduled bank for the remaining cost of the project beyond the capital subsidy sought for support. This Bank Guarantee shall be valid for three years and to be drawn in favour of Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying. The original Bank Guarantee is to be kept in the safe custody of the State Implementing Agency. Also a copy of the Bank Guarantee and a declaration form need to be uploaded in the online portal at the submission of the application or to be attached with the application. The Format of the Bank Guarantee and declaration has been annexed with the guidelines.

5.8.2. Fund Flow for the Centrally Sponsored Components:

The funds for Centrally Sponsored Components of the NLM Scheme under the submissions will be released to the State Government's RBI Account. Thereafter, the State Government need to transfer the fund to the Account of the State Nodal Agency / State Implementing Agency within 21 days and the State Share to be released within 40 days. Detailed procedure for handling of fund for CSS Scheme may be followed as per Department of Expenditure, Ministry of Finance Guidelines issued time to time in this regards. The State Nodal Agency / State Implementing Agency needs to open a dedicated bank account to receive funds under NLM Scheme and mapped with PFMS system.

5.8.3. Fund Flow for Other Central Sector Components for Central or State Government Agencies:

The fund flow for assistance under the NLM Scheme to be provided to the Central Government Agencies or State Government Agencies or Start Ups etc. shall follow the norms prescribed by the Department of Expenditure and General Financial Rules.

5.9. Mode of application for entrepreneurship project: The application for entrepreneurship project and also the Central Sector projects will be accepted through online portal to be developed by the DAHD through Small Industries Development Banks of India (SIDBI). However, till the online portal becomes fully functional the application for taking benefit under the scheme may also be submitted manually to the State Implementing Agency as per the format annexed at **Annexure V**.

5.10. Submission of projects under Central Sector fodder seed multiplication sub-components: The Central Government will incentivise for all categories of fodder seed production by ICAR, National Seed Corporation (NSC), Indian Farmers Fertilizer Cooperative Limited (IFFCO), KrishakBharati Cooperative (KRIBHCO), National Agricultural Cooperative Marketing Federation of India (NAFED) and other Central Agencies as well as State Agriculture Universities (SAU), State Government seed production corporations, public and private organizations, dairy cooperatives and milk federations, National Dairy Development Board (NDDB) and other organizations with good credibility.

The applications in respect of the State Agencies/ State Governments/ Institutions in the States and other credible agencies other than the Central Agencies shall submit their application through State Implementing Agencies like State Livestock Development Board or agencies identified by the State Government for National Livestock Mission.

However, in respect of the applications for Dairy Cooperatives and Milk Federations, the applications shall be submitted through NDDB. The NDDB, after evaluating those applications shall submit the same to the Department of Animal Husbandry and Dairying for funding. The assistance for fodder seed production by the Dairy Cooperatives and Milk Federation will be placed to the NDDB for further release to the Dairy Cooperatives and Milk Federations.

5.11. Ranking of the States for performance: It has been decided to rank the States based on the performance in implementing the programmes under the National Livestock Mission. The parameters for the performance will be as under:

- a. Number of units established under entrepreneurship programme
- b. No. of jobs created through such entrepreneurship development
- c. Quantity of fodder seed produced and improvement of fodder production

- d. Number of farmers benefitted.
- e. Number of Livestock Insured under insurance programme.
- f. Number of innovative projects promoted and actually implemented.
- g. Creation of awareness amongst the farmers and youth for the scheme.
- h. Timely utilization of funds released by the Department as Central Share.
- i. Project implementation time
- j. Timely release of State share.
- k. Increase in production of egg, meat and wool in the state.
- l. Increase in availability of good germplasm through entrepreneurship programme

5.12. Force Majeure: Extraordinary events or circumstances beyond human control such as events described as an act of God (like a natural calamity) or events such as a war, strike, public health emergency, riots, crimes (but not including negligence or wrong-doing, predictable/ seasonal rain and any other events specifically excluded). In such case the Department will examine the fate of the subsidy or incentivized amount provided to the beneficiaries or institutions as per the provision of law.

5.13. Residual

5.13.1. In case of change in control of the selected Applicant due to change in equity ownership or change in promoter entities, DAHD should be informed immediately.

5.13.2. To obviate any malpractices in the financial matters where disbursements are made to beneficiaries by the Government, it has been decided to provide a deterrent against corrupt practices for promotion of transparency and equity. Therefore, keeping in view the sensitivities involved in the process and taking cue from the instructions of the Central Vigilance Commission regarding adoption of an Integrity Pact in the matter of procurement, it has been decided to obtain undertaking(s) from Applicants under the Scheme.

5.13.3. Two formats of undertakings are enclosed as **Annexure VIII and IX**. These undertakings are to be furnished by Applicants, duly signed by himself or Authorized Signatory of the FPOs/FCOs/JLGs/SHGs/ Section 8 companies depicting the designation along with authorization to do so.

5.13.4. The undertaking in **Annexure VIII** for confirming the compliance of integrity will be provided by Applicants after the submission of claims for disbursement of Incentive and in any case before release of funds. The release of Incentives shall be withheld until the above-mentioned undertaking is provided.

5.13.5. These guidelines shall be amended/ modified at any time during continuance of the Scheme and such amendment/ modifications shall be binding to all the Applicants, including the Selected Applicants, during the tenure of the Scheme.

5.13.6 All applicants need to sign the surety bond for operation of the project as per **Annexure X** attached to this Guidelines.

6. Sub-Mission and Detailed guidelines

6.1 Sub-mission on Breed Development of Livestock and Poultry: under this submission the following activities will be undertaken:

6.1.1. Activity I:-Establishment of Entrepreneurs for breed development of Rural Poultry.

S. No.	Name of the components	Establishment of Entrepreneurship for breed development of Rural Poultry.
01	Objective	<p>Bringing unorganized rural poultry farming sector into organized sector</p> <p>Promotion of entrepreneurship in the field of rural poultry in a sustainable manner</p> <p>Establishment of forward and backward linkages</p> <p>Popularizing the different alternative non-conventional low cost feeding</p>
02	Salient features	<p>The Entrepreneurship will be developed by inviting the individual, Self Help Group (SHG)/Farmers Producer Organizations (FPO)/Farmers Cooperatives (FCOs)/ Joint Liability Groups (JLGs) and Section 8 companies for establishment of Parent Farm, Rural Hatchery, brooder cum mother unit for Production of Hatching Eggs, and Chicks and rearing of the said chick upto four week in the mother unit. Emphasis will be given to those entrepreneurs who will be able to establish forward and backward linkage (Hub and Spoke).</p> <p>The Central Government will provide 50% capital subsidy for the cost of the project for establishment of Parent Farm, Rural hatchery and Mother Unit with minimum 1000 parent layers.</p> <p>The Entrepreneurs / Eligible Entities need to arrange the remaining amount through bank loan or from the financial institution or self-financing</p> <p>The bird maintained in the parent farm will be of Low Input Technology Birds or such kind of bird which will be sustained at the free range management system.</p> <p>Central Poultry Development Organizations, Central Avian Research Institutions, Directorate of Poultry Research and State Veterinary Universities and other private organizations with certificates of guaranteed production will be eligible to supply birds to the entrepreneurs. Necessary Technical specifications for birds will be issued separately. A list of Low input technology birds is at Annexure VI.</p> <p>Indicative list of components eligible for funding is at Annexure I</p>
03	Eligible Entities	Individual/ SHGs/FPOs/FCOs/JLGs and Section 8 companies.
04	Funding pattern	<p>One Time 50% capital subsidy of the total project cost will be provided with maximum subsidy up to Rs. 25 lakh for each unit.</p> <p>Subsidy will be the capital subsidy and provided in two equal instalments. First instalment will be released upfront to the scheduled bank or financial institutions like NCDC etc. by SIDBI to be credited to the Entrepreneur/ Eligible Entities' account after the bank or financial institution releases First Instalment of loan to the beneficiary and its confirmation by State Implementing Agency. Beneficiaries will be eligible for release of the second instalment by SIDBI after completion of the project and certified so by the State Implementing Agency.</p> <p>In case of the self-financing project, the project needs to be appraised by the bank where the Entrepreneurs/ Eligible Entity have account. The first instalment of 50% subsidy will be provided into the lending bank by SIDBI where the beneficiary has account. The subsidy will be released only when the beneficiary has made expenditure of 25% cost for the project towards infrastructure and has been verified by the State Implementing Agency. Remaining amount of 50% subsidy will be provided by SIDBI after completion of the project and verified by State Implementing Agency.</p> <p>The Entrepreneurs / Eligible Entities interested in taking benefit under the entrepreneurship project in self-financing mode, need to provide Bank Guarantee from the scheduled bank valid for three years for the remaining cost of the project beyond the cost of subsidy sought for support. This Bank Guarantee shall be provided in the name of the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying. The original Bank Guarantee is to be kept in the safe custody of the State Implementing Agency. Also a copy of the Bank Guarantee and a declaration form need to be uploaded in the online portal at the submission of the application or to be attached with the application. The Format of the Bank Guarantee and declaration has been annexed with the guidelines.</p> <p>No subsidy will be provided for working capital, personal vehicle, purchase of land, cost for rent and lease of land.</p>
05	Implementing Authority	State Implementing Agency and DAHD of GOI

06	Essential requirements of beneficiaries to avail benefit under the submission.	Entrepreneurs / Eligible Entities shall also meet the criteria as specified at para 5.3 above.
07	Follow up of the project	State Implementing agency will follow up the project for the period of 2 years after completion with regards to its operation.

Activity II: Establishment of Entrepreneur for breed development in small ruminant sector (sheep and goat farming):

Sl. No.	Name of the components	Establishment of Entrepreneur for breed development in small ruminant sector (sheep and goat farming)
1.	Objectives	<ul style="list-style-type: none"> i. To develop entrepreneurs in small ruminant sector ii. To develop the sustainable business model on sheep-goat iii. To incentivize Individuals Entrepreneurs, FPOs, FCOs, SHGs, JLGs, and Section 8 companies for development of integrated rural sheep-goat production system. iv. Conversion of the small ruminant sector from unorganised sector to organised sector through promotion of entrepreneurship & investment and creation of forward & backward linkages v. Spreading awareness about scientific rearing practices, nutrition, disease prevention etc vi. Promotion of stall feeding model of sheep and goat rearing.
2.	Salient Feature	<ul style="list-style-type: none"> 1. Creation of entrepreneurs through one-time capital subsidy to Individuals/ Self Help Group (SHG)/Farmers Producer organizations (FPO)/Farmers Cooperatives (FCOs)/Joint Liability Groups (JLGs) and Section 8 companies. 3. The Entrepreneurs / Eligible Entities can establish sheep and goat breeding unit with minimum 500 females and 10 males. The sheep and goat unit to be established with the High Genetic Variety used for producing Goat milk, meet and fine wool quality. The breed of sheep and goat can be selected from the list provided with this guideline or in consultation with the State Government. 4. The Central Government will provide up to 50% back ended subsidy for the capital cost of the project. 5. The Entrepreneurs / Eligible Entities need to arrange the remaining amount through bank loan or from the financial institution or self-financing 6. Indicative list of components for which the funding for subsidy can be availed is at Annexure II.

3.	Pattern of Assistance	<p>50% capital subsidy up to Rs. 50 lakh in two instalments. Subsidy will be the capital subsidy and provided in two equal instalments.</p> <p>Subsidy will be the capital subsidy and provided in two equal instalments. First instalment will be released upfront to the scheduled bank or financial institutions like NCDC etc. by SIDBI to be credited to the Entrepreneur/ Eligible Entities' account after the bank or financial institution releases First Instalment of loan to the beneficiary and its confirmation by State Implementing Agency. Beneficiaries will be eligible for release of the second instalment by SIDBI after completion of the project and certified so by the State Implementing Agency.</p> <p>In case of the self-financing project, the project needs to be appraised by the bank where the Entrepreneurs/ Eligible Entity have account. The first instalment of 50% subsidy will be provided into the lending bank by SIDBI where the beneficiary has account. The subsidy will be released only when the beneficiary has made expenditure of 25% cost for the project towards infrastructure and has been verified by the State Implementing Agency. Remaining amount of 50% subsidy will be provided by SIDBI after completion of the project and verified by State Implementing Agency.</p> <p>The Entrepreneurs / Eligible Entities interested in taking benefit under the entrepreneurship project in self-financing mode, need to provide Bank Guarantee from the scheduled bank valid for three years for the remaining cost of the project beyond the cost of subsidy sought for support. This Bank Guarantee shall be provided in the name of the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying. The original Bank Guarantee is to be kept in the safe custody of the State Implementing Agency. Also a copy of the Bank Guarantee and a declaration form need to be uploaded in the online portal at the submission of the application or to be attached with the application. The Format of the Bank Guarantee and declaration has been annexed with the guidelines.</p> <p>No subsidy will be provided for working capital, personal vehicle, purchase of land, cost for rent and lease of land</p>
4.	Eligible Entities	FPOs/FCOs/SHG/JLG/Individuals/ Section 8 companies
5.	Implementing Agencies	State Implementing Agency of State Animal Husbandry Department, DAHD, MoFAHD, GOI.
6.	Essential requirements of beneficiaries to avail benefit under the submission.	Entrepreneurs/ Eligible Entities shall also meet the criteria as specified at para 5.3 above.
7.	Follow up of the project	State Implementing agency will follow up the project for the period of 2 years after completion with regards to its operation.

Activity III. Genetic Improvement of Sheep and Goat breeds

Following will be the activities under the Genetic Improvement of Sheep and Goat breeds.

- i. Establishment of Regional Semen Production Laboratory and Semen Bank for sheep and goat
- ii. Establishment of State Semen Bank
- iii. Propagation of Artificial Insemination through existing cattle and buffalo Artificial Insemination centres
- iv. Import of exotic sheep and goat germplasm

(i) Establishment of Regional Semen Production Laboratory and Semen Bank for sheep and goat:

S. No	Name of the components	Establishment of Regional Semen Production Laboratory and Semen Bank for sheep and goat
1.	Objectives	<p>Genetic improvement of indigenous descript breeds of sheep/goat through selective breeding</p> <p>Genetic up gradation of non-descript sheep/goat breeds through cross breeding with high genetic rams or bucks to increase productivity.</p> <p>Reducing negative selection and inbreeding among sheep & goat breeds by propagation of superior male germplasm through artificial insemination and other developed assisted reproductive technologies.</p>
2.	Salient Feature	<p>Under this activity the Central Government will provide assistance for establishment of Frozen Semen production laboratory for goat and liquid semen production laboratory for sheep at regional level in a strategic location to cater the semen of elite animals to the nearby states in the said region.</p> <p>This Establishment of Regional Semen Station will be based on the Expression of Interest from the States in the said Region which can produce semen and supply semen for the states at the region. Also the regional semen station will work as regional semen bank for frozen semen for goat.</p> <p>The Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying has developed Minimum Standards for Sheep and Goat Semen Processing (MSP). The semen labs will need to adhere to the guidelines of Minimum standard protocols for semen processing while preparing the project proposals. The structure, requirements of logistics, equipment etc has been elaborated in the MSP. The semen produced in this laboratory will be distributed to the neighbouring states.</p>
3.	Pattern of Assistance	<p>The funding pattern will be 60:40 for all the states except NER & Himalayan States where it will be 90:10 and 100% to UTs.</p> <p>One time grants-in-aid up to Rs. 400.00 lakh as Central Share will be provided to the concerned state eligible for establishment of Regional Semen Station for construction of semen laboratory, maintaining of breeding bucks and rams, sourcing of locally available high genetic merit animals and processing of semen. Rs. 30 lakh will also be provided as one time expenditure towards procurement of consumables, medicines, chemicals etc. required for first time processing of semen.</p> <p>The regional semen bank shall have to generate its own resources for running of the semen station. No recurring expenditure will be provided for running expenses of the semen station.</p>
4.	Eligible Entities	State Livestock Agencies

5.	Implementing Agencies	State Implementing Agency of the State Animal Husbandry Department, MoFAHD, Gol and State Animal Husbandry
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(ii) Establishment of State Semen Bank:

S. No.	Name of the sub components	Establishment of State Semen Bank
1.	Objectives	Genetic improvement of sheep/goat breeds through selective breeding by propagation of superior male germplasm through artificial insemination
2.	Salient Feature	For propagation of Artificial Insemination Technology for goats through frozen semen, there will be a requirement of storage depot at the state level for onward supply of goat frozen semen to the AI centres. The State Semen Bank working for storing cattle and buffalo frozen semen can work as the semen bank for goats also. Therefore, one time assistance will be provided for strengthening the existing state semen bank for goat frozen semen storing by providing equipment and storing containers.
4.	Pattern of Assistance	One-time assistance up to Rs. 10.00 lakh will be provided to the state for strengthening of existing cattle and buffalo semen bank to store and distribute goat frozen semen. The assistance will be provided for procurement of equipment like cryo-container and other related equipment. This assistance would be through 100% Central assistance for all the States/UTs.
5.	Eligible Entities	State Livestock Agencies Animal Husbandry Department, State Government
6.	Implementing Agencies	State Implementing Agency of the State Animal Husbandry Department, MoFAHD, Gol and State Animal Husbandry Departments

(iii) Propagation of Artificial Insemination through existing cattle and buffalo Artificial Insemination centres:

S. No.	Name of the components	Propagation of Artificial Insemination through existing cattle and buffalo Artificial Insemination centers
1.	Objectives	Genetic improvement of sheep/goat breeds through selective breeding by propagation of superior male germplasm through artificial insemination
2.	Salient Feature	Cattle and buffalo AI centers will be strengthened to perform goat and sheep AI through supplying requisite equipment (Goat AI Travis, AI gun, vaginal speculum, head light) and providing necessary training to the cattle AI workers.
3.	Pattern of Assistance	One-time assistance upto Rs. 7000/- for each AI Centre will be provided for procurement of goat AI crate, AI gun, vaginal speculum, head light on the cost sharing basis @ 60:40 for all states except NER & Himalayan States where it will be 90:10.
4.	Eligible Entities	State Livestock Agencies Animal Husbandry Department, State Government

5.	Implementing Agencies	State Implementing Agency of the State Animal Husbandry Department, MoFAHD, GoI and State Animal Husbandry Departments
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(iv) Import of exotic sheep and goat germplasm

S. No.	Name of the sub components	Import of exotic sheep and goat germplasm
1.	Objectives	Genetic improvement of sheep/goat breeds through selective breeding by propagation of superior male germplasm through artificial insemination
2.	Salient Feature	The Central Government will assist the States for need based import of sheep and goat germplasm to increase productivity of the non-descript animals and to produce good quality cross bred animals to increase wool, milk and meat production. The superior exotic breeds will be maintained as pure breeds in the nucleus farms at the state government. The State needs to notify their breeding policy before sending the proposal for import of germplasm.
3.	Pattern of Assistance	One-time assistance will be provided to the state for import of sheep and goat germplasm in the form of live animals on the cost sharing basis @ 60:40 for all the States except NER and Himalayan States which will be 90:10 and 100% for UTs.
4.	Eligible Entities	State Livestock Agencies State Livestock Boards Animal Husbandry Department, State Government
5.	Implementing Agencies	State Implementing Agencies of the State Animal Husbandry Department and State Animal Husbandry Departments

Activity IV: Promotion of Piggery Entrepreneur

S. No.	Name of the Activity	Promotion of Piggery Entrepreneur
1	Objectives	Promotion of entrepreneurship & investment and creation of forward & backward linkages in the sector improvement of per animal productivity of pig population of the country through genetic upgradation To substitute import dependency in pork and start export of pork and pork products Spreading awareness about scientific rearing practices, nutrition, disease prevention etc.
2	Salient Feature	Creation of entrepreneurs through one-time capital subsidy to Individual/ Self Help Group (SHG)/Farmers Producer organizations (FPO)/Farmers Cooperatives (FCOs)/Joint Liability Groups (JLGs) and Section 8 companies. The entrepreneur will be provided assistance from the establishment of a breeder farm with minimum 100 sow and 10 boars breeding animals from the Central or State Government/ university farms or local farmers with high genetic merit. The Central Government will provide 50% up to Rs. 30 lakh capital subsidy towards the capital cost of the project. The funding will be provided for the cost of housing, breeding animals along with transportation & insurance cost, equipment /machines. The Entrepreneurs / Eligible Entities need to arrange the remaining amount through bank loan or loan from the financial institution or self-financing No subsidy will be provided for purchase of land, rent and lease cost for land, working capital, personal vehicle.

3	Pattern of Assistance	<p>One time 50% capital subsidy of the total project cost will be provided with a maximum subsidy up to Rs. 30 lakh for each unit subject to the scheme guidelines.</p> <p>Subsidy will be the capital subsidy and provided in two equal instalments. First instalment will be released upfront to the scheduled bank or financial institutions like NCDC etc. by SIDBI to be credited to the Entrepreneur/ Eligible Entities' account after the bank or financial institution releases First Instalment of loan to the beneficiary and its confirmation by State Implementing Agency. Beneficiaries will be eligible for release of the second instalment by SIDBI after completion of the project and certified so by the State Implementing Agency.</p> <p>In case of the self-financing project, the project needs to be appraised by the bank where the Entrepreneurs/ Eligible Entity have account. The first instalment of 50% subsidy will be provided into the lending bank by SIDBI where the beneficiary has account. The subsidy will be released only when the beneficiary has made expenditure of 25% cost for the project towards infrastructure and has been verified by the State Implementing Agency. Remaining amount of 50% subsidy will be provided by SIDBI after completion of the project and verified by State Implementing Agency.</p> <p>The Entrepreneurs / Eligible Entities interested in taking benefit under the entrepreneurship project in self-financing mode, need to provide Bank Guarantee from the scheduled bank valid for three years for the remaining cost of the project beyond the cost of subsidy sought for support. This Bank Guarantee shall be provided in the name of the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying. The original Bank Guarantee is to be kept in the safe custody of the State Implementing Agency. Also a copy of the Bank Guarantee and a declaration form need to be uploaded in the online portal at the submission of the application or to be attached with the application. The Format of the Bank Guarantee and declaration has been annexed with the guidelines.</p> <p>No subsidy will be provided for working capital, personal vehicle, purchase of land, cost for rent and lease of land</p> <p>Indicative list of equipment eligible for funding is at Annexure III.</p>
4	Eligible Entities	FPOs/SHG/ FCOs/JLG/section 8 companies/ Individual
5	Implementing Agencies	State Implementing Agency of the State Animal Husbandry Department, MoFAHD, GOI.
6	Essential requirements of beneficiaries to avail benefit under the submission.	Entrepreneurs shall also meet the criteria as specified at para 5.3 above.
7	Follow up of the activity	The State Implementing Agency shall follow up the progress of the project for two years.

Activity V: Genetic Improvement of Pig breeds

Under this activity following activities will be implemented:

- (i) Establishment of pig semen collection and processing lab
- (ii) Import of exotic pig germplasm

(i) Establishment of pig semen collection and processing lab

S.No.	Name of the Sub components	Establishment of pig semen collection and processing lab
1	Objectives	Increase of per animal productivity through propagation of high genetic merit male germplasm (boar semen) through artificial insemination technique Reduce inbreeding Reduce ingress of sexually transmitted diseases
2	Salient Feature	Unlike large ruminants, frozen semen technology is not successful for pig. Hence artificial insemination in pig is mostly done with liquid boar semen with a success rate of 60% when the semen is processed scientifically and hygienically. Presently, technologies are available to prolong the life of liquid semen. To propagate the high genetic merit boar semen covering large numbers of sow, the semen needs to be processed to develop large numbers of doses which will remain active for longer duration. Therefore, assistance will be provided to establish semen processing lab at the government pig farm to produce high quality liquid boar semen for artificial insemination.
3	Pattern of Assistance	The funding pattern will be 60: 40 for all States except NER & Himalayan States where it will be 90:10. One time grants-in-aid up to Rs. 150.00 lakh will be provided as Central share to the concerned state for construction of semen laboratory, maintaining breeding boar unit. Rs. 30 lakh will also be provided as onetime recurring expenditure for procurement of consumables, medicines, chemicals etc. for first time processing of semen.
4	Eligible Entity	State Livestock Agencies Animal Husbandry Department, State Government
5	Implementing Agencies	State Implementing Agencies of the State Animal Husbandry Department and State Animal Husbandry Departments

(ii) Import of Pig Germplasm

S. No.	Name of the components	Import of exotic pig germplasm
1	Objectives	Inclusion of superior male germplasm in existing native genepool for genetic upgradation of indigenous pigs for production of crossbred animals with higher per animal productivity
2	Salient Feature	The Central Government will assist the States for need based import of pig germplasm to increase productivity of the non-descript animals and to produce good quality cross bred animals to increase per animal meat production. The superior exotic breeds will be maintained as pure breeds in the nucleus farms at the state government. However, the State needs to formulate and notify their breeding policy for pigs before sending the proposal for import of germplasm.
3	Pattern of Assistance	One time assistance will be provided to the state for import of pig exotic germplasm in the form of live animals on cost sharing basis 60:40 for all States except NER & Himalayan States where it will be 90:10.
4	Beneficiaries	State Livestock Agencies State Livestock Boards Animal Husbandry Department, State Government
5	Implementing Agencies	State Implementing Agencies of the State Animal Husbandry Department.

Sub-Mission on feed and fodder development

The sub-mission of the feed and fodder will have the following activities:

Activity (i): Assistance for quality Fodder seed production

Activity (ii): Entrepreneurial activities in feed and fodder

Activity I: Assistance for quality Fodder seed production

S. No.	Name of the activity	Assistance for quality Fodder seed production
1.	Objectives	<ul style="list-style-type: none"> i. Establishing effective seed production chain ii. Capacity building of state functionaries and livestock owners in forage production, conservation and utilization iii. Establishing convergence and synergy among ongoing Plan programmes and stakeholders for fodder resource development.
2.	Salient Feature	<ul style="list-style-type: none"> • Under this activity, fodder seed chain i.e. breeder, foundation and certified quality fodder seed production will be incentivized. • This component targeted towards multiplication of seeds of high yielding fodder varieties which has been developed through research and innovations, significantly showing better performance, for which incentives will be provided.
3.	Pattern of Assistance	<ul style="list-style-type: none"> • 100% incentivization for production of all categories of fodder seed production by ICAR, National Seed Corporation (NSC), Indian Farmers Fertilizer Cooperative (IFFCO), KrshakBharati Cooperative Limited (KRIBHCO), National Agricultural Cooperative Marketing Federation(NAFED) and Central Agencies as well as State Agriculture Universities (SAU), Hindustan Insecticides Limited (HIL), State Government seed production corporations, public and private organizations, dairy cooperatives and milk federations and other organizations with good credibility. • The seed production incentives will be given to central seed agencies like National Seed Corporation (NSC), ICAR, IFFC, KRIBHCO, NAFED, HIL, NDDDB etc directly and to the State Implementing Agency for the applications received from the State seed producing agencies. However, the assistance for Dairy Cooperatives and Milk Federations will be routed through NDDDB. • The assistance will be provided in two instalments on the basis of per kg cost of seed. The first instalment will be provided after approval of viable proposal. The second instalment will be provided after production of seed and its self-certification by concerned beneficiary agency. • Cost which will be assisted for productions of various category of seeds are as under: <ul style="list-style-type: none"> • Breeder Seed up to Rs.250/kg • Foundation Seed up to Rs.150 /Kg • Certified Seed up to Rs. 100/Kg • When farmers are engaged by the seed producing agencies in the Fodder seed production activity, 75% of the subsidy to be passed on to the farmers and 25% should be kept by the seed producing agency to meet expenditure including certification cost.

4.	Eligible Entity	ICAR institutions/ NSC/NAFED/KRIBHCO/IFFCO/Central Multi-State Cooperatives such as NCCF/ Hindustan Insecticides Limited (HIL), NDDB, Dairy Cooperatives, Milk Federations or other agency approved by the National Livestock Mission as central nodal agency at national level, based on the approved Plan for these agencies at Central level. State Government seed production corporations, public and private organizations and other organizations with good credibility.
5.	Application form	The agency will apply filling the details in the application at Appendix II for seeking assistance. The Eligible Entity shall also submit the final production of seed when seeking the second assistance.
6.	Follow-ups of the activity	The agency will send the report as per format prescribed in Appendix- III

Activity II: Entrepreneurship activities in feed and fodder

Objective of the Mission:

- i. Development of Entrepreneurship in the field of Feed and fodder.
- ii. Promoting, developing and disseminating forage technologies through frontline technology demonstrations.
- iii. To make available quality fodder with affordable price at the local level.
- iv. To encourage the fodder production by the local farmers for supplying to these entrepreneurs. Thus use the fodder as a cash crop.

Details of the Activity are as under:

Entrepreneurial activities in feed and fodder

S. No.	Name of the activity	Entrepreneurial activities in feed and fodder
1.	Salient Feature	<p>The private entrepreneurs, SHG, FCOs JLG, FPOs, Dairy Cooperative societies, section 8 companies will be incentivized for the value addition such as Hay/Silage/Total Mixed Ration(TMR)/ Fodder Block and storage of fodder by providing 50% percent capital subsidy towards project cost to the beneficiary for Infrastructure development related to hay/silage at village level/ Fodder blocks making units for procuring machinery like bailer, block making machines, TMR machines/equipment, Forage harvester /reaper, Heavy duty Power operated Chaff cutters and any other PHT equipment as per the requirement/need.</p> <p>The Entrepreneurs / Eligible Entities need to arrange the remaining amount through bank loan or from the financial institution like NCDC or self-finance. The Eligible Entities may also avail benefit under Animal Husbandry Infrastructure Development Fund (AHIDF) for funding of the remaining amount of the project as per the scheme guidelines.</p> <p>Indicative list of eligible equipment for funding is at Annexure IV</p>

2.	Pattern of Assistance	<p>50% of the total project cost with subsidy up to Rs. 50 lakh will be provided to the beneficiaries through State Implementing Agencies in two equal instalments as per scheme guidelines.</p> <p>Subsidy will be the capital subsidy and provided in two equal instalments. First instalment will be released upfront to the scheduled bank or financial institutions like NCDC etc. by SIDBI to be credited to the Entrepreneur/ Eligible Entities' account after the bank or financial institution releases First Instalment of loan to the beneficiary and its confirmation by State Implementing Agency. Beneficiaries will be eligible for release of the second instalment by SIDBI after completion of the project and certified so by the State Implementing Agency.</p> <p>In case of the self-financing project, the project needs to be appraised by the bank where the Entrepreneurs/ Eligible Entity have account. The first instalment of 50% subsidy will be provided into the lending bank by SIDBI where the beneficiary has account. The subsidy will be released only when the beneficiary has made expenditure of 25% cost for the project towards infrastructure and has been verified by the State Implementing Agency. Remaining amount of 50% subsidy will be provided by SIDBI after completion of the project and verified by State Implementing Agency.</p> <p>The Entrepreneurs / Eligible Entities interested in taking benefit under the entrepreneurship project in self-financing mode, need to provide Bank Guarantee from the scheduled bank valid for three years for the remaining cost of the project beyond the cost of subsidy sought for support. This Bank Guarantee shall be provided in the name of the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying. The original Bank Guarantee is to be kept in the safe custody of the State Implementing Agency. Also a copy of the Bank Guarantee and a declaration form need to be uploaded in the online portal at the submission of the application or to be attached with the application. The Format of the Bank Guarantee and declaration has been annexed with the guidelines</p> <p>No subsidy will be provided for working capital, purchase of personal car, land, leasing and hire of land and office accommodation.</p>
3.	Eligible Entity	Private entrepreneurs, SHG, FCOs, JLG, FPOs, Dairy Cooperative societies, section 8 companies
4.	Implementing Agencies	DAHD, GoI State Animal Husbandry Department State Livestock Agencies/ State Livestock Boards
5.	Eligibility criteria	Entrepreneurs shall also meet the criteria as specified at para 5.3 above
6.	Follow up of the project	The State Implementing Agency will follow up the project up to 2 years after its implementation with regard to its operation.

Sub Mission on Innovation and Extension

Objective of the Mission:

- a. To incentivize the Institutes, Universities, Organizations carrying out research and development related to sheep, goat, pig, poultry, other livestock, fodder sector, meat and other livestock products.
- b. To carry out extension activities for propagating the various activities taking place in the livestock sector.
- c. To carry out the work of livestock insurance
- d. Encourage persons, institutions, state governments to bring innovations for the sector.

This sub-mission has the following activities:

- i. Activity I: Research and Development and innovations
- ii. Activity II: Extension activities
- iii. Activity III: Livestock Insurance

Activity I: Research and Development and innovations

S. No.	Components	Research and Development and innovations
1	Objective	<p>To incentivize research activities and innovations for the advancement of sheep, goat, pig, poultry, other livestock, fodder sector, meat and other livestock products.</p> <p>To address the underlying issues faced by the livestock farmers</p> <p>To contribute to sustainable livestock farming</p> <p>To incentivize Innovative projects and activities</p>
2	Salient Features	<p>Assistance will be provided to the ICAR, Central Institutes, State Government University farms and other credible institutions involved in research in the sheep, goat, poultry, pig and feed and fodder sector for research and development. Assistance will also be provided for innovative activities for development of the sector and also technology transfer.</p> <p>The Start-ups will also be incentivized for problem solving in the sheep, goat, poultry, pig, feed and fodder. The Department will conduct a Startup Grand Challenge Programme.</p> <p>The concerned Central Agencies/ University farms will submit the proposal to the NLM division of the Department through their parent organization/ State Animal Husbandry Department. The parent organization/ Department is to approve and recommend the project before forwarding.</p> <p>The individual and other organizations intended for seeking assistance for innovative projects need to get the project approved from the concerned State Animal Husbandry and forwarded through the SLEC.</p> <p>The projects under Innovation and Research and Development submitted by the concerned Agency / Universities/ ICAR and other credible organization shall be evaluated and appraised by the Expert Group and recommend the same for consideration for funding by the Empowered Committee.</p> <p>The Institutes intended for taking assistance shall submit applications as per Appendix IV</p>
3.	Funding Pattern	The Central Government will provide 100% assistance for conducting Extension, R&D and Innovation activities.
4	Eligible Entity	ICAR, Central Institutes, State Government University farms and other credible institutions and Start Ups.
5	Implementing Agency	Department of Animal Husbandry and Dairying, Ministry of Animal Husbandry and Dairying, Government of India
6.	Follow up	The agency will submit progress report at least on each quarter depending on the project.

Activity II: Extension activities

S. No.	Components	Extension Activities
1.	Objectives	To increase awareness among all stakeholders involved in animal husbandry sector regarding scientific livestock rearing through available extension platforms
2.	Salient Features	<p>Under this activity assistance will be provided for IEC activities like seminar, training and capacity Building, Livestock Farmers Groups/Breeder's Association, Organization of various promotional activities related to Animal Husbandry, scheme promotion etc. at State, Central and Regional Level, Operationalization of Farmers Field Schools, Exposure Visit for Livestock Extension Facilitators (LEF), Exposure Visit of farmer, Staff component of livestock Extension, Demonstration Activities, Creating awareness through social media and audio visual support, extension education and creation of literature on livestock extension etc. The information can be disseminated through various platforms such as audio-visual aids (TV and radio shows and talks), social media, hoardings, panels, Kiosks, printed materials etc.</p> <p>Various extension agencies would be assisted in preparation and development of video and multimedia packages on livestock extension. In addition, support should be provided to development and documentation of success stories and best practices on livestock sector. Materials thus produced would be widely distributed through all the agencies involved in the animal husbandry sector.</p> <p>The existing human resources employed at the field level in agriculture and allied departments including GopalMitras, PraniBandhus, Village extension workers, NGOs, progressive farmers, etc., would also be included for capacity building.</p> <p>The Agencies intended for taking assistance under this activity shall submit application in the format at Appendix V.</p>
3.	Funding pattern	<p>For conducting events of scheme promotion, dissemination of knowledge and related activities for promoting animal husbandry at Block, District and State Level, the assistance will be provided up to Rupees one lakh, two lakh and three lakh for each Block, District and State for conducting of each event depending on the availability of fund. The funding pattern will be 60:40 for all States except NER & Himalayan States, where it will be 90:10</p> <p>For conducting events of scheme promotion, dissemination of knowledge and related activities for promoting animal husbandry in the Regional and Central Level, 100% assistance will be provided.</p> <p>For training and capacity buildings 100% funding will be provided for carrying out training for entrepreneurship, Poultry Management, Scientific Poultry Production, scientific rearing of sheep goat and pig, Artificial Insemination technology for sheep & goat and pig, feed and fodder development</p> <p>For IEC activities funding will be provided to the State Animal Husbandry Department for publication of posters, pamphlets, publications and audio-visual media.</p> <p>100% Funding will be provided to the Central Government Agencies and Department of Animal Husbandry and Dairying for creating awareness on the Schemes implemented by the Central Government and matters related to creating awareness on Animal Husbandry Development.</p>
04	Beneficiaries	State Animal Husbandry Department and DAHD, GOI.
05	Implementing Agencies	State Animal Husbandry Department, DAHD, GOI.

Activity III: Livestock Insurance

S. No.	Components	Livestock Insurance																																				
1.	Objectives	To manage the life risk and uncertainties by providing protection mechanisms to the farmers against any eventual loss of their animals due to death and to demonstrate the benefit of the insurance of livestock to the people.																																				
2.	Salient Features	<p>The Risk Management & Insurance is to be implemented in all the Districts of the Country including those carved out in future, if any.</p> <p>The indigenous / crossbred milch animals, pack animals (Horses, Donkey, Mules, Camels, Ponies and Cattle/ Buffalo Male), and other Livestock (Goat, Sheep, Pigs, Rabbit, Yak and Mithun etc.) will be under the purview of this component.</p> <p>Benefit of subsidy is restricted to 5 animals per beneficiary per household for all animals except for sheep, goat, pig and rabbit, where the benefit will be restricted to 5 cattle units (1 cattle unit = 10 sheep/goat/pig/rabbit). Therefore, the benefit of subsidy to sheep, goat, pig and rabbit is to be restricted to 5 Cattle Unit per beneficiary per household. However, a beneficiary having less than 5 animals / 1 Cattle Unit can also avail the benefit of subsidy. Efforts will be made to bring all large and small animals under insurance coverage.</p> <p>The Risk management and Insurance component envisages the following payments from central funds as Grant's - in -Aid:</p>																																				
3.	Funding Pattern	<p>Subsidy for insurance premium will be paid as per following:</p> <p>NORMAL AREAS</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Central Share</th> <th>State Share</th> <th>Beneficiary Share</th> </tr> </thead> <tbody> <tr> <td>BPL / SC / ST</td> <td>40%</td> <td>30%</td> <td>30%</td> </tr> <tr> <td>APL</td> <td>25%</td> <td>25%</td> <td>50%</td> </tr> </tbody> </table> <p>NORTH EAST REGION /HIMALAYAN STATES</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Central Share</th> <th>State Share</th> <th>Beneficiary Share</th> </tr> </thead> <tbody> <tr> <td>BPL / SC / ST</td> <td>50%</td> <td>30%</td> <td>20%</td> </tr> <tr> <td>APL</td> <td>35%</td> <td>25%</td> <td>40%</td> </tr> </tbody> </table> <p>UNION TERRITORIES</p> <table border="1"> <thead> <tr> <th>Category</th> <th>Central Share</th> <th>State Share</th> <th>Beneficiary Share</th> </tr> </thead> <tbody> <tr> <td>BPL / SC / ST</td> <td>80%</td> <td>NIL</td> <td>20%</td> </tr> <tr> <td>APL</td> <td>60%</td> <td>NIL</td> <td>40%</td> </tr> </tbody> </table> <p>(b) 100% Payments of Honorarium to the Veterinary Practitioners and</p> <p>(c) 100% Publicity</p> <p>However, a beneficiary may insure more than 5 animals by paying the full premium without availing the benefit of subsidy for all animals except sheep, goat, pig and rabbit. Similarly, a beneficiary may insure more than 5 'Cattle Unit' by paying the full premium without availing the benefit of subsidy for sheep, goat, pig and rabbit.</p> <p>For this purpose, 'household' will be defined on the same lines as adopted under Mahatma Gandhi National Rural Employment Guarantee Act, 2005, here-in-after referred to as MNREGA for brevity. Efforts should be made to insure the animals for at least three years rather than one year.</p>	Category	Central Share	State Share	Beneficiary Share	BPL / SC / ST	40%	30%	30%	APL	25%	25%	50%	Category	Central Share	State Share	Beneficiary Share	BPL / SC / ST	50%	30%	20%	APL	35%	25%	40%	Category	Central Share	State Share	Beneficiary Share	BPL / SC / ST	80%	NIL	20%	APL	60%	NIL	40%
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APL	60%	NIL	40%																																			

4.	Beneficiaries	<p>State Animal Husbandry Department. However, special efforts will be made to associate and involve the registered milk societies / unions for ensuring the animals belonging to the members of these societies / unions as a group.</p> <p>The insurance companies will also be persuaded to give some further concessions to these societies / unions with respect to the rate of premium as the work of their agents will be reduced otherwise.</p>																		
5.	Rate of Premium	<table border="1"> <tr> <td>One year</td> <td>(Normal area)</td> <td>4.5%</td> </tr> <tr> <td></td> <td>NER/Himalayan States</td> <td>5.5%</td> </tr> <tr> <td>Two year</td> <td>(Normal area)</td> <td>8 %</td> </tr> <tr> <td></td> <td>NER/Himalayan States</td> <td>9 %</td> </tr> <tr> <td>Three year</td> <td>(Normal area)</td> <td>11%</td> </tr> <tr> <td></td> <td>NER/Himalayan States</td> <td>11.5%</td> </tr> </table>	One year	(Normal area)	4.5%		NER/Himalayan States	5.5%	Two year	(Normal area)	8 %		NER/Himalayan States	9 %	Three year	(Normal area)	11%		NER/Himalayan States	11.5%
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	NER/Himalayan States	5.5%																		
Two year	(Normal area)	8 %																		
	NER/Himalayan States	9 %																		
Three year	(Normal area)	11%																		
	NER/Himalayan States	11.5%																		
6.	Implementing agencies	State Animal Husbandry Department and State Implementation Agencies																		
7.	Selection of Insurance companies	For Selection of Insurance companies, insurance, settlement of claim, the implementing agency may follow the guidelines as per Appendix VI																		

Appendices and Annexures

APPENDIX I

REPORTING OF OUT PUT AND OUT COME FOR NATIONAL LIVESTOCK MISSION (SEE PARA 5.4)					
OUTPUTS (Year)			OUTCOME (Year)		
Output	Indicators	Targets	Outcome	Indicators	Targets
1. Poultry entrepreneurship development	1.1 Number of units established		1. Improved employment opportunities in livestock	1.1 No. of jobs created	
	1.2 Total Number of beneficiaries supported		2. Creation of backward and forward linkages	2.1 Number of farmers linked	
2. Sheep and goat entrepreneurship development	2.1. Number of units established		3. Increased employment opportunities	3.1 Number of farmers linked	
	2.2. Total Number of beneficiaries supported		4. Creation of backward and forward linkages	4.1 No. of jobs created	
3. Piggery entrepreneurship development	3.1 Number of units established		5. Improved employment opportunities in livestock	5.1. Number of farmers linked	
	3.2 Total Number of beneficiaries supported		6. Creation of backward and forward linkages	6.1 No. of jobs created	
4. Genetic Up-gradation of Sheep and Goat	4.1 Total No of regional semen stations established		7. Breed Improvement in Sheep and Goat	7.1 No of Semen doses produced(In Lakh)	
	4.2 Total number of semen banks established			7.2 No. of Artificial Insemination performed.	
	4.3 Total number of existing Artificial Insemination Centres equipped with goat AI.		8. Increased productivity	8.1 No of cross bred animals produced.	
	4.4 Total number of animals imported				
5. Genetic Up-gradation of Pig breeds	5.1 Total number of Pig semen stations established		9. Breed Improvement in pig	9.1 No of Pig Artificial Insemination done.	
				9.2 No. of piglets produced through AI.	

6. Assistance for production of fodder seed	6.1 Quantity of fodder seed produced		10. Greater fodder Production	Quantity of fodder produced	
7. Assistance for establishing fodder entrepreneurs	Total number of Fodder Entrepreneurs supported (in numbers)		11.Enrich fodder production by the entrepreneurs	11.1 Quantity of Silage (in Ton)	
	7.1. Total number of Silage plants established			11.2 Quantity of Fodder Block (in Ton) / TMR	
	7.2 Total number of Fodder Block units established/ TMR				
8. Skill development, technology transfer and extension	8.1 Number of IEC Campaign		12. Enhanced skill pool of farmers vets / para vet	12.1 Number of farmers/ vets/ paravets skilled	
	8.2 Number of capacity building workshops/ training conducted				

Note: The target to be indicated for each quarter against both the outcome and output as well as for entire financial year
The reporting of Outcome and Output frame work to be done on quarterly basis

Appendix II

Application format for component Assistance for Fodder seed Production

S. No	Components	Detailed
1.	Name of the State	
2.	Name of the Agency	
3.	Status of the agency.(Central/State/Public/Private/Autonomous/ Others/)	
4.	Season proposed for fodder seed production	
5.	Name of the fodder seed and Class of fodder seeds proposed for fodder seed production (Breeder/ Foundation / Certified)	
6.	Locations of seed production programme to be undertaken (Area and crop wise)	
7.	Indicate the region proposed is being identified for the fodder seed production. Please furnish details of fodder seed production undertaken in the region during the last three year Availability of irrigation /source of irrigation.	
8.	Source of procurement of parent seeds proposed for fodder seed production	
9.	Please indicate details of assistance undertaken from Central/ State Govt. scheme during the last three financial year including the current year	

10:	Five-year action Plan prepared for fodder seed production	
11:	This is to certify that the agency will follow the Government of India financial rules and regulations and also any agreement entered with the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.	

Signature of Competent Authority of the Agency

Recommending Authority.

Indicative target plan for Assistance for Fodder seed production to be appended with Appendix II

Name of the State/Implementing Agency(IA):

Season:

Year:

S. No.	Fodder seed production	Class of Seeds Breeder/Foundation/ Certified	Target quantity (quintal)	Target proposed By State/IA		Target approved By GOI	
				Physical	Financial	Physical	Financial
		Breeder					
	i) Maize						
	ii) Sorghum						
		Foundation					
	i) Maize						
	ii) Sorghum						
	Certified						
	i) Maize						
	ii) Sorghum						

Note: The names of fodder seeds are indicative only not exhaustive. The DAHD will issue the exhaustive list of fodder seed as per need.

Appendix III

Format for Quarterly/Annual Progress Report for Assistance for Fodder seed production

Name of the State/Implementing Agency (IA):

Season:

Year:

S.N	Interventions	Class of Seeds Breeder/ Foundation/ Certified	Target of seed production approved by GOI (Quintal)	Achievements for QI/ II/III		Achievement till 31st March	
				Physical	Financial	Physical	Financial
	Fodder seed production						
		Breeder					

	i.Maize						
	ii.Sorghum						
		Foundation					
	i.Maize						
	ii.Sorghum						
		Certified					
	i.Maize						
	ii.Sorghum						

Appendix IV

Sub-mission: Research and Development, Extension and Innovation

Format for submitting proposal under the component Research and Development and Innovations

1	Name of the institute / Organization:
2	Name of the Department
3	Title of the Research problem/project
4	Rationale of the project
5	Present status of the proposed project (with references)
6	Brief Methodology of the project
7	Duration of the project (months)
8	Expected outcome (Contributions to livestock sector)
9	Financial implications: (Detailed break up of recurring and nonrecurring expenditure)
10	A concrete plan for propagating the outcome of the project to the farmers:
11	Any other relevant information related to the proposal:
12	Name and signature of the Supervisors and Co supervisors:
13	Name and signature of the Head of the Institute

Certified that the Organization shall submit utilization certificate and progress report of the project to the Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.

Signature of the Project Instructor / coordinator

Recommending Authority

Appendix V

Form for submitting proposal under the component of IEC support for extension activities

1.	Name of the agency / Organization / Department:
	a) Address:
	b) Telephone No. and Fax No.:
	c) Email ID of the HOD:
2.	Present status of requirement and availability of Information support,
3.	Present statistics of Information support:
	i) State :
	ii) With the implementing agency:
4.	Location and addresses of Extension Centres already developed, if any under the scheme and, proposed to be developed (Full details must be provided).
5.	Nature of IEC Campaign/ Extension activities along with the extension plan
6.	Name and signature of the Head of the Animal Husbandry Department:

Appendix VI

GUIDELINES FOR SELECTION OF INSURANCE COMPANY, INSURING THE ANIMALS AND CLAIM SETTLEMENT

1. Engagement of Insurance Company:

In order to get the maximum benefit in terms of competitive premium rates, easier procedures of issue of policy and settlement of claims, Chief Executive Officer (CEO) of the State Implementation Agency will be empowered to decide upon the Insurance company(s) and the terms and conditions. The State Implementation Agency of individual state may give the mandate as per IRDAI norms to IRDAI approved intermediary who has participated in tender along with insurance company and stood L 1 and enter into a tripartite agreement (MOU) with intermediary and insurance company to define the roles and responsibilities of each party. While selecting Insurance Company, besides premium rates offered, their capacity to provide services, terms and conditions and service efficiency on objective criteria should also be taken into account. The CEO will invite quotations in writing from those public and private general insurance companies having a network in the State/UTs or a considerable part of the State/UTs. Only one tender should be floated for the whole State/UTs considering state as a unit. The tender may comprise of 3 or more items defining the type of geographical area for which separate premium rates may be quoted by the insurance company/agencies. A tender committee would be constituted by the State/UTs Government in which one representative to be nominated by the Joint Secretary, DADF; GoI would be there who is responsible for implementing the 'Risk Management & Insurance' as a component of sub-mission on livestock development of NLM in GoI.

Under no circumstances, the rate of premium should exceed 4.5% in Normal Area, 5.5% in NER/ Himalayan States for annual policies, 8% in Normal Area, 9% in NER/NER/ Himalayan States for two-year policies and 11% in Normal Area, 11.5% in NER/NER/ Himalayan States for three year policies.

Normally, a single insurance company should be entrusted for insurance work in States/UTs for a particular type of area and if more than one company bids are the same premium rate then the area

should be divided equally as far as possible.

The Service Tax, if applicable need to be paid by the concerned beneficiary / State/UT Government as per the prevalent Rules.

2. Process for Insuring Animals

In order to generate confidence among the farmers about the efficacy of the 'Risk Management & Insurance' as component of sub-mission on innovation and extension of NLM, it is important that the policy cover should take effect once the basic formalities like identification of animal, its examination by the veterinary practitioner, assessment of its value and its tagging along with payment of the premium to the insurance company or its agent by the owner are completed. The selected insurance company will have to agree to this. However, it is possible that the selected Insurance Company may demand for the whole premium in advance so that the insurance cover can take effect immediately after the owner pays the beneficiary share. In order to take care of this problem, there should be an arrangement by which the admissible percentage of the premium amount of the Central and State Share, of maximum number of animals that generally expected to be insured in a period of three month, is paid in advance to the insurance company by the CEO. The selected insurance company, on its part, should issue instructions to their branches that as and when a share of the premium is paid by the owner, they should issue the policy with immediate effect. Target of getting the number of animals insured in one-month period for payment of advance to the Insurance Company should be on realistic basis and recouping of the advance fund should be on the basis of subsequent progress made by the concerned Insurance Company.

An animal shall be insured for its current market price. The market price of the animal to be insured will be assessed jointly by the beneficiary and the insurance company in the presence of the Veterinary officer. The minimum value of animal should be assessed by taking Rs.3000 per liter per day yield of milk or as per the price prevailing in the local market (declared by Government) for cow and Rs.4000 per liter per day yield of milk or as prevailing in the local market (declared by Government) for buffalo. The market price of pack animals (Horses, Donkey, Mules, Camels, Ponies and Cattle/Buff. Male) and Other livestock (Goat, Sheep, Pigs, Rabbit, Yak and Mithun) are to be assessed by negotiation jointly by the owner of the animal and by insurance company in the presence of a Veterinary Doctor. In case of dispute the price fixation would be settled by the Gram Panchayat / BDO.

The examination of the animal while issuing insurance policy is to be carried out by the veterinary practitioners registered with the Veterinary Council of India.

The animal insured to be properly tagged and uniquely identified at the time of insurance. The animal already tagged in other program need not be again tagged for this purpose and the existing Unique Identification (UID) of tag should be used for insurance as well. The ear tagging should be with 12-digit unique animal ID Number generated by NDDB. The Veterinary Practitioners may guide the beneficiaries about the need and importance of the tags fixed for settlement of their claim so that they take proper care for maintenance of the tags. While processing an insurance proposal, 2 photographs should be attached, out of which one photograph should be that of the animal with the Owner and the other photograph should be of the animal with its EAR TAG clearly visible.

In case of sale of the animal or otherwise transfer of animal from one owner to another, before expiry of the Insurance Policy, the authority of beneficiary for the remaining period of policy will have to be transferred to the new owner. The modalities for transfer of livestock policy and fees and sale deed etc required for transfer, should be decided while entering into contract with the insurance company.

3. Settlement of Claim

The method of settlement of claim should be very simple and expeditious to avoid unnecessary hardship to the insured. While entering into contract with the insurance company, the procedure to be adopted / farmers who has insured their animals. documents needed for settlement of claim should be clearly spelt out. Only four documents would be required by insurance companies for settling the claims viz. intimation with the Insurance Company, Insurance Policy paper, Claim Form and Postmortem Report. All documents/forms for insuring as well as settling the claims should be made available by the insurance agency in local language or in English language. In case the farmers' copy of the Insurance Policy paper is lost then the Insurance Company would immediately issue a duplicate Insurance Policy paper. In case of claim becoming due, the payment of the insured amount should be made within 21-25 days positively after submission of requisite documents. If an Insurance company fails to settle the claim within 21-25 days of submission of documents, the insurance company will be liable to pay, a penalty of 12% compound interest per annum to the beneficiary. In case of claim becoming due, the payment of the insured amount should be made within 15 days positively after submission of requisite documents. If an Insurance company fails to settle the claim within 15 days of submission of documents, the insurance company will be liable to pay, a penalty of 12% compound interest per annum to the beneficiary. While insuring animal, CEOs must ensure that clear cut procedures are put in place for settlement of claims and the required documents are listed and the same is to be made available to concerned beneficiaries along with the policy documents. The beneficiary should get full payment of the sum insured in case of death of animals. In case, there are delays in settling a claim or the claim is rejected, it must be fully justified by the concerned insurance company to the claimant under intimation to the District Monitoring Committee and also to SIA. The provisions to these effects must be incorporated in the MOU with the insurance companies.

4. Payment of Honourarium to the Veterinarian: The Veterinarian will be eligible to get honorarium of Rs 50/- per animal at the stage of insuring the animal and Rs. 125/- per animal at the stage of conducting post-mortem and issuing post-mortem certificate in case of any insurance claim. The Central Government will provide the amount needed for payment of honorarium to the SIAs. The CEOs should ensure that payment is made to Veterinary Practitioners at the end of each quarter for the animal's insured and veterinary certificates issued by them in that quarter.

Note: Default in settlement of claim or any types of deficiency in services on part of Insurance Companies should immediately be brought to the notice of the Insurance Regulatory and Development Authority (IRDA) which is a nodal authority in the country in this regard with intimation to the District Monitoring Committee and DAHD, Gol.

Monitoring:

The DAHD will develop MIS system for maintaining data. The State Government will be advised for physical monitoring of beneficiaries. Monitoring will also be done through National Review Meeting, Regional and State Review Meeting.

**Indicative list of items eligible for funding under Rural Poultry Entrepreneurship
(1000 POULTRY PARENT STOCK TO GET 500 HATCHING EGG PER DAY)**

S. No.	PARTICULARS	Unit
1	Construction of shed (30 ft x 100 ft)	3000 sq.ft
2	Electric Brooder(1000 DOC/Brooder)	2 no.
3	Chick Feeder (one feeder/60 Chicks)	18 no.
4	Chick Drinker (one drinker/60Chicks)	18no.
5	Adult Feeder (one feeder/60 Adult birds)	18 no.
6	Adult Drinker (one drinker/60 Adult birds)	18 no.
7	Cost of 1100 parents stock (1000 F + 100 M)	1100 nos.

HATCHERY FOR HATCHING 3000 HATCHING EGG / WEEK TO GET 2250 Day Old Chick (DOC)

S. No.	PARTICULARS	Unit
1	Construction of Hatchery building (30' ft x 100 ft)	3000 sq.ft
2	Incubator of capacity 15000 eggs	1 no.
3	Hatcher capacity 5000 eggs	1no.
4	Generator set (15 KVA)	1 no.

MOTHER UNIT FOR BROODING 2000 CHICKS UPTO 4WEEKS

S. No.	PARTICULARS	Unit
1	Construction of shed (20 ft X 50 ft) X 4 nos. for 8000 DOC	4000 sq.ft
2	Electric Brooder (1000 DOC/ Brooder)	6 nos.
3	Chicks Feeder (50 DOC/ Feeder)	160 nos.
4	Chicks Drinker (50 DOC/ Drinker)	160 nos.

Annexure II

Indicative list of items eligible for funding under sheep and goat entrepreneurship for establishment of breeder goat farm of 500 females and 25maleSheep and Goat		
S. No.	Particulars	Unit
1	Construction of housing shed for parent stock (55 ft. x100ft)	5500 sq.ft
2	Kid shed & sick pen	3500 sq.ft
3	Cost of Doe	500 nos.
4	Cost of Buck	25 nos.
5	Transportation cost	525 nos.
6	Fodder cultivation	5 acre
7	Chaff cutter	2 nos.
8	Integrated silage making machine	1no.
9	Equipment	For 525 no. of animals
10	Insurance	For 525 of animals
11	Miscellaneous	As required

Annexure III

Indicative list of items eligible for funding under piggery entrepreneurship (100 sow and 10 boar)		
S.No	Particulars	Unit
A	Construction of Pig Sty	
1	Construction of shed for Sow @20sqft per animal (for 100 animals)	2000 sq.ft
2	Construction for boar unit @ 20 sqft per animal	700 sq.ft
3	Farrowing pen @ 80 sq.ft per sow for 50 sows (considering 50% of pigs are allows in farrowing)	4000 sq.ft
4	Cost of construction of pens for piglets @10 sq. ft per piglet for 3000piglets	30000 sq.ft
5	Store room 500 sq.ft	500 sq.ft
B	Cost for Piglets for breeding	
1	Cost of 100 five months old gilt weighing about 50 kg	100 nos.
2	Cost of 10 six months old gilts weighing about 60 kg	10 nos.
C	Other cost	
1	Cost of Equipment	For 110 nos. of animals
2	Equipment for piglets	For 3000 nos.
3	Insurance charges (@7.5%)	For 110 nos.
4	Veterinary Aid	For 110 nos.
	Total (C)	
	Total Cost A+B+C	

**Indicative list of components eligible for funding for silage making unit for entrepreneurs
(Production capacity 2000-2400 MT per annum)**

S. No.	Item
1.	Construction of shed and godown (2000 square ft) @ 200per.sq.ft for material
2.	Bailing Unit (120-150 mt) – one no.
3.	Harvester one no.
4.	Power operated chaff cutter one no.
05	Installation cost of plant and machinery
06	Shed for machinery storage (60'x50'x20')@200 per sq. ft
07	Tractor with Mounted Trolley- One number

Indicative list of components eligible for funding for fodder block making unit for entrepreneurship (30 MT/day)

Sl. No.	Item	Quantity
1.	LD-HD Cutting with electric motor starter, panel board, V-belt, Pulleys etc. LD Low Density Materials (like paddy straws)	01 no.
2.	.HD-LD Mixer complete with Electric Motor, HD-High Density materials (concentrate Pre-mixes)	01 no.
3.	.Densified TMR block maker with electric motors starter, hydraulic oil, cooling system	02 no.
4.	Platform electronic Weigh Scale	02 no.
5.	Main control panel complete with tarter contractors, relays meter, conduits, and fittings, cable trays etc.	1 lot
6.	Stitching machine double thread	02 sets
7.	Molasses Storage tank (2 MT capacity) OH molasses tank (80 kgs)capacity	01 sets
8.	Grinding section fitted with an elevator motor connecting piece of magnet. Bin for grindables in M.S. handle operated, Hammer mill half circle capacity 2 MT/ hr with sieve and complete with foundation fitted with motor and drive parts.	02 Sets
9.	Mixing section fitted with ground material lifting elevator with discharge with motor and connecting piece of magnet Bin above batch mixture with discharge control. Paddle type batch mixture with MS construction fitted with motor.	01 set
10.	Power supply (Gen set) 140 KVA	01 set
11.	Shed for machinery (60'x50'x20') @ Rs. 200persq.ft	01 set
12.	Shed for storing raw materials(60'x100'x20') @ Rs. 200 per sq. ft	01 set

Annexure V



Government of India

Ministry of Fisheries, Animal Husbandry & Dairying

Department of Animal Husbandry & Dairying

APPLICATION FORM

FOR ASSISTANCE UNDER DIFFERENT SUB MISSIONS OF
NATIONAL LIVESTOCK MISSION (NLM)

		PHOTO
		Signature
S. No.	Particulars	
1.	Sub Mission under which assistance is required	
2.	Name of Beneficiary	
3.	Father's Name/Husband's Name	
4.	Mother's Name	
5.	Aadhaar Number	
6.	Mobile No.	
7.	Address	
8.	Category (General/SC/ST/OBC & others)	
9.	Educational Qualification	
10.	Experience in Livestock Farming	
11.	Whether attended any Livestock Farming related trainings (if yes, give details)	
12.	Annual Income from Agricultural/Business activities	
13.	Land Acquired/lease (in Acres)	
14.	No. of birds/ animals being maintained	
15.	Cost of project	
16.	Expected Output	
17.	Amount of subsidy	
18.	Whether subsidy for this purpose has been availed earlier?	
19.	GIS Location	
20.	Number of small farmers proposed to be integrated	
21.	Source of 50 % project cost (beneficiary share)	
	Bank Details	
20.	PAN No.	
21.	Bank Account Number	

22.	Name of Bank	
23.	Address of Bank Branch	
24.	IFSC Code of Bank	
25.	MICR Code of Bank	
26.	Any other relevant information	

(Signature of Applicant)

Enclosure:

- Supporting documents [Proof of Address, Aadhar card, caste certificate (if applicable), proof of land holding (ownership or lease), education certificate, photocopies of training certificate, income proof, bank statement for last six months
- Detailed Project Report including total cost, recurring cost, net income etc
- Name, Aadhar no., mobile no. and address of the farmers linked/attached with the entrepreneur
- photograph of the project area
- Experience about any livestock farming activities done earlier
- Proof of remaining 50% project cost (beneficiary share)
- GI Tagging of the Project site

Recommendation of State Implementing Agency

It is certified that I have personally inspected the above project site _____
_____ proposed for funding under Entrepreneurship by Sh. _____, resident of
village _____, the applicant full fills all the necessary conditions for the release of subsidy
and the same may be released to him. The photographs are attached herewith.

State

Signature

Annexure-VI

**Indicative List of Low-Input Technology birds eligible under National Livestock Mission
implemented by the Department of Animal, Husbandry, Dairying & Fisheries,
Government of India**

S. No.	Name of the organization	Type of stock
	PUBLIC SECTOR ORGANIZATIONS	
1.	Central Poultry Development Organization and Training Institute (SR), Bangalore.	a) Chabro b) Kalinga brown c) Kaveri
2.	Central Poultry Development Organization(ER), Bhubaneswar.	Kalinga brown
3.	Central Poultry Development Organization(NR), Chandigarh	Chabro
4.	Central Poultry Development Organization (WR), Mumbai.	a) Kalinga brown (Kadakhnath stocks are also available)
5.	Project Directorate on Poultry, ICAR, Hyderabad	a) Gramapriya b) Vanaraja
6.	Central Avian Research Institute, Izatnagar	a) CARI GOLD b) Nirbheek c) Hitcari d) Cari-Debendra e) Upcari
7.	Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar, Karnataka	a) Giriraja b) Girirani c) Swarnadhara
8.	Poultry Research Station, Nandam, Chennai Tamil Nadu	Nandanam 99
9.	Kerala Veterinary University, Mannuthy	a) Gramalakshmi Gramashree Krishipriya
10.	Sri Venkateshwara Veterinary University, Rajendernagar, Hyderabad	Rajasri
	PRIVATE SECTOR ORGANIZATIONS	
1.	Dr. YashvantAgritech Pvt. Ltd, Jalgaon, Maharashtra	Satpuda-desi
2.	Indbro Research and Breeding Farm Pvt. Ltd., Hyderabad	Rainbow rooster
3.	Kegg Farms, New Delhi	Kuroiler
4.	Shipra Hatcheries, Patna, Bihar	Shipra

This list may be updated by this Department as and when required and updated list will also be put up on the website of the Department <http://dahd.nic.in>

Performa Bank Guarantee

(From any scheduled commercial bank to be valid for three years)

This Deed of Guarantee executed on this ____ day of _____, 20... at by (from any scheduled commercial bank), having its Head Office / Registered Office at and inter-alia a Branch Office at ____ (hereinafter referred to as the Bank or 'the Guarantor', which expression shall unless it be repugnant to the subject or context hereof be deemed to include its successors and assigns).

In favour of Department of Animal Husbandry and Dairying Ministry of Fisheries, Animal Husbandry and Dairying (DAHD), Government of India, Kishi Bhawan New Delhi Bhawan, New Delhi-110001 (hereinafter referred as "DAHD")

WHEREAS

A. [.....], Individual/ Farmers Producer Organization, Joint Liability Group (JLG)/ Farmers Cooperative Organization/ Section 8 companies under-----and having its Registered Office/ Home at [--- -----] (herein after referred to as 'the Applicant" which expression unless repugnant to the subject or context includes its successors. Legal representatives and permitted assigns) and has been awarded approval under the above scheme vide Letter Reference ----- dated.....

B. In terms of the undertaking dated ----- and Clause ----- of the Guidelines Reference No. -----dated, the Applicant has to provide a Bank Guarantee for an amount equivalent to INR which is calculated in line with the undertaking.

C. At the request of the Applicant, the Guarantor has agreed to provide this guarantee, being these presents, guaranteeing the due and punctual performance / discharge by the Applicant of its obligations.

NOW THEREFORE THIS DEED WITNESSETH AS FOLLOWS

The Guarantor hereby irrevocably guarantees the due and compliance of terms by the Applicant of all its obligation under the said undertaking and approval letter, as amended from time to time.

A. The Guarantor shall, without demur, pay to DAHD sums not exceeding in aggregate ----- (INR ----) within five (5) bank working days (as per the Reserve Bank of India) of receipt of a written demand thereof from DAHD stating that the Applicant has failed to meet its obligations under the said undertaking. The Guarantor shall have not to go into the veracity of any breach or failure on the part of the Applicant or validity of the demand so made by DAHD shall pay the amount specified in the demand notwithstanding any direction to the contrary given or any dispute whatsoever raised by the Applicant or any other person. The Guarantor's obligations hereunder shall subsist until all such demands are duly met and discharged in accordance with the provisions hereof;

B. The Guarantor agrees that its liability under this guarantee shall in no manner be affected by any such variation, alteration, modification, waiver dispensation and that no further consent of the Guarantor is required for giving effect to any such variation, alteration, modification, waiver dispensation with or release of security;

C. This Guarantee shall be irrevocable and shall remain in full force for three years from the date of issuance.

D. Until and unless discharged / released earlier by DAHD in accordance with the provisions of the said undertaking, the Guarantor 's liability in aggregate shall be limited to a sum of INR ----- (INR)

E. This Guarantee shall not be affected by any change in the constitution or winding up of the Applicant / Guarantor or and absorption, merger or amalgamation of the Applicant / Guarantor with any other person;

F. The Guarantor has power to issue this Guarantee and discharge the obligations contemplated herein, and the undersigned is duly authorized to execute this Guarantee pursuant to the power granted under.

All future correspondence with reference to this Guarantee shall be made to.....
(Bank Na The jurisdiction in relation to this Guarantee shall be the Courts at New Delhi and Indian Law shall be applicable.

IN WITNESS WHERE OF THE GUARANTOR HAS SET ITS HANDS HEREUNTO ON THE DAY, MONTH AND YEAR FIRST HEREINABOVE WRITTEN

SIGNED AND DELIVERED by

Bank by the hand of it's.....

and authorized official.

Name and Address).

Performa for submission of Bank Guarantee

(Undertaking from the Applicant on the letterhead)

1. I/ We,....., hereby, acknowledge that the back ended subsidy that would / may be provided to me/us under the Entrepreneurship programme under National Livestock Mission for establishment of at village.....District....., as per the Guidelines, communications, after relying upon, the information provided by us to avail the said subsidy.

2. We hereby confirm that the information provided by us for availing the said back ended is true, correct and complete in all respects and that no material fact/information that may have an adverse impact on the information provided by us for availing the said Incentive has been concealed.

3. We hereby confirm that the Committed Investment of the 25% of the project cost, as per the approval letter, is to be made by us within six months from our own fund the date of approval letter.

4. With regard to the aforesaid transactions, we hereby undertake the following:

We undertake to provide Bank Guarantee/s from a schedule commercial Bank for the amount which is mentioned below:

Sl. No.	Particulars	Details
1.	Date of issuance of Approval Letter	
2.	Validity period of BG*	
3.	Amount of BG	

* Valid for three years or renewed till the date DAHD releases such Guarantee whichever is later.

A. We understand and agree that, we are legally bound to renew the BG / issue fresh BG, failing which MoFPI/ PMA may invoke the BG.

B. In case of loss, mutilation, force majeure or any other eventualities, with respect to Original BG (favouring DAHD), DAHD will not be liable for the same and the onus would be with us to arrange for alternate/duplicate BG in place of the original BG.

We also understand that the BG will be invoked or released as per the provision in the guidelines.

Date

Signature

(Name & designation with address)

Performa for integrity compliance

(To be signed by full time Director / CEO / MD of the company/ Partner/ Proprietor of the firm duly depicting the designation and submitted on official stationery of the Applicant along- with the authorization to do so)

Format- A: Initial Undertaking

1. Whereas, the Applicant namely _____ has submitted an Application under National Livestock Mission for establishment of the project.....(Name of the project), seeking Subsidy for entrepreneurship development.

2. Now, therefore, the Applicant commits to observe the following principles during his / her association / engagement with DAHD with the process of appraisal and verification of Application for the approval of Application and disbursement of Subsidies under NLM Scheme.

2.1. The Applicant will not directly or through any other person or firm, offer, promise or give to any of the DAHD's officer(s) or consultant or agency representative (appraisal or/and PMA appointed by DAHD to handle the Application) involved in the process of dealing with Application or to any third person any material or other benefit which he/she is not legally entitled to in order to obtain in exchange any advantage of any kind whatsoever before or during or after the process of the Application for grant of approval or disbursement of Subsidies under the scheme.

2.2. The Applicant will not commit any offence under the relevant Indian Penal Code, 1860/ Prevention of Corruption Act, 1988. Further, the Applicant will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the DAHD.

2.3. The Applicant will disclose any and all payments he/she has made, is Committed to or intends to make to agents, brokers or any other intermediaries, other than regular employees or officials of the Applicant, in connection with the grant of approval or/and disbursement of Subsidies.

2.5. The Applicant will not offer any illicit gratification to obtain unfair advantage.

2.6. The Applicant will not collude with other parties to impair transparency and fairness.

2.7. The Applicant will not give any advantage to anyone in exchange for unprofessional behaviour.

3. The Applicant agrees that if it is found that the Applicant has made any incorrect statement on this subject, the Application will be closed or rejected and DAHD reserve the right to initiate legal action of whatsoever nature. In case if DAHD has disbursed the Subsidies under NLM Scheme, the amount disbursed to Applicant be recoverable along with interest calculated at 3 years SBI MCLR prevailing on the date of disbursement, compounded annually, besides blacklisting of the Applicant and initiation of legal action of whatsoever nature at the discretion of DAHD.

4. The contents of the above undertaking have been gone through and after understanding the same is being executed / given on.....day of (month / year)

Date

Signature

(Name in full & designation with address)

Annexure -X**SURETY BOND (TO BE PROVIDED AS REGISTERED BOND)**

I / We, M/s. _____, a beneficiary under National Livestock Mission located at address at _____ (hereinafter called the "Obligors") are held fully and firmly bound to the President of India (hereinafter called the "Government") for the sum of Rs. _____/- (Rupees _____ only) well and truly to be paid to the Government on demand and without a demur for which payment I/ we firmly bind myself/ ourselves and our successors and assignees by these presents.

SIGNED on the _____ day of _____ in the year Two Thousand.....

WHEREAS on the Obligors' request, the Government as per Sanction Order No. _____ Dated _____ (hereinafter referred to as the "Letter of Sanction") through which back ended subsidy of Rs. _____/- (Rupees _____ only) for the purpose of setting up of project..... under National Livestock Mission developed By M/s. _____ (description of the Entrepreneurs/ Eligible Entity) at _____, out of which the sum of "Rupees _____" have been paid to the Obligors (the receipt of which the Obligors do hereby admit and acknowledge) on condition of the Obligors executing a bond in the terms and manner contained hereinafter which the Obligors have agreed to do.

NOW the conditions of the above written obligation is such that if the Obligors duly fulfill and comply with all the conditions mentioned in the letter of sanction and the scheme guidelines. The Obligors will abide by the terms & conditions of the subsidy by the target dates, if any specified therein.

THAT the Obligors shall not divert the subsidy amount and entrust execution of the Project or work concerned to another institution(s) or organization(s).

THAT the Obligors shall abide by the clauses indicated in the scheme guidelines under which the above subsidy has been sanctioned and any other conditions specified in this agreement and in the event of their failing to comply with the conditions or committing breach of the guidelines/ bond, the Obligors individually and jointly will be liable to refund to the President of India, the entire amount of the subsidy with interest of 10% per annum thereon. If a part of the subsidy is left unadjusted/ unspent after the expiry of the period within which it is required to be spent, interest @10% per annum shall be charged upto the date of its refund to the Government, unless it is agreed to be carried over.

THAT the 'Obliger' is committed to run the project for which the back ended subsidy has been provide for a minimum period of three years and shall not demolish, close, change of propriety or sale out the equipment, machinery or any part of the project.

THAT the 'Obliger' shall intimate the Department of Animal Husbandry and Dairying and also the State Implementing Agency, in case of damage of the project in case of FORCE MAJEURE, for taking decision on the fate of the subsidy.

AND THESE PRESENTS ALSO WITNESS THAT the decision of the Secretary, Department of Animal Husbandry and Dairying, Ministry of Fisheries, Animal Husbandry and Dairying to the Government of India on the question whether there has been breach or violation of any of the terms or conditions mentioned in the sanction letter shall be final and binding upon the Obligers and;

IN WITNESS WHEREOF these presents have been executed as under on behalf of the Obligers the day herein above written in pursuance of the Resolution No. _____ Dated _____ passed by the governing body of the Obligers (in case of the FPOs/ FCOs/JLGs/ SHG and Section 8 companies), a copy whereof is annexed hereto as Annexure-II and by _____ for and on behalf of the President of India on the date appearing below:-

Signature of the AUTHORISED PERSON

Signed for and on behalf of

(Name of the Obliger in block letters)

(Seal / Stamp of Organization)

1. Signature of witness

Name & Address

2. Signature of witness

Name & Address

Annexure XI

INDICATIVE LISTS OF SUPPLIERS FOR VARIOUS INPUTS

1. INDICATIVE LIST OF LOW-INPUT TECHNOLOGY DAY OLD CHICK SUPPLIERS

S.No	Type of stock	Name of the organization & contact details
1.	a) Chabro b) Kalinga brown c) Kaveri	Central Poultry Development Organization and Training Institute (SR), Hesaraghatta, Bangalore – 560 088, Karnataka e-mail: cpdoti@gmail.com 080-28466239/28466226/28466240
2.	Kalinga brown	Central Poultry Development Organization(ER), Nayapalli (Near Jayadev Bihar),Bhubaneswar-751012, Odisha. e-mail : - cpdo_er@rediffmail.com Phone :- 0674-2420175(O)
3.	Chabro	Central Poultry Development Organization(NR), Industrial area, Phase-I, Chandigarh – 160 002. e-mail: cpdonrhd@gmail.com Tel.: 0172-2655391/460
4.	a) Kalinga brown b) Kadaknath	Central Poultry Development Organization (WR), Aarey Milk Colony, Goregaon (East), Mumbai - 400 065 e-mail: cpdo_mum65@yahoo.com +91 22 29272497
5.	a) Gramapriya b) Vanaraja	ICAR - Directorate of Poultry Research Rajendranagar, Hyderabad 500 030, Telangana, India Ph: +91-40-24018687 Email: dprhatchery@gmail.com
6.	a) CARI GOLD b) Nirbheek c) Hitcari d) Cari-Debendra e) Upcari	ICAR-Central Avian Research Institute Bareilly, Izatnagar-2431 122 e-mail: cari_director@rediffmail.com Tel.:581-2303223; 2300204
7.	a) Giriraja b) Girirani c) Swarnadhara	Karnataka Veterinary, Animal and Fisheries Sciences University, Nandinagar, Bidar- 585 401, Karnataka e-mail: regkvafsu@gmail.com Tel.: 08482-245241
8.	Nandanam 99	Poultry Research Station, Madhavaram Milk Colony, Chennai – 600 051. e-mail: ippm@tanuvas.org.in Tel.: 044-25552650
9.	a) Gramalakshmi b) Gramashree c) Krishipriya	Kerala Veterinary University, Mannuthy College of Avian Sciences & Management, Alanallur Via, Palakkad Thiruvazhamkunnu -678 601. pfso@kvasu.ac.in, casmt@kvasu.ac.in, acadcasmt@kvasu.ac.in 04924 208206, 8281028206
10.	Rajasri	Sri Venkateshwara Veterinary University, Rajendernagar, Hyderabad Department of Poultry Science, College of Veterinary Science, Tirupati – 517 502. e-mail: adcvstcpt@gmail.com, drshakilas@yahoo.co.in Tel.: 0877-2249932, 09440167225

11.	Satpuda-desi	Dr. YashvantAgritech Pvt. Ltd, 265, Bhaskar Market, Jalgaon – 425001, Maharashtra e-mail: aditya344@gmail.com Mobile: 9423769495; 9423492238
12.	Rainbow rooster	Indbro Research and Breeding Farm Pvt. Ltd., House No : 2-4-118/117, South Swaroop Nagar, Uppal, Hyderabad-500 039. e-mail: drkotaiah@indbropoultry.com; info@indbropoultry.com Tel.: 040 – 2721 5594; 040 – 2414 5594
13.	Kuroiler	Kegg Farms Private Ltd., 8th Floor, Eros Apartments, 56 Nehru Palace, New Delhi – 110019. e-mail: info@keggfarms.com mobile: 08448455564
14.	Shipra	Shipra Hatcheries, Flat No.6, Rizvi Building, Jamal Road, near kenara bank, Patna-800008, Bihar. Mobile: 09801765464

INDICATIVE LIST OF FARMS FOR GOAT GERMPASM

Government Goat Breeding Farms

Name of the Farm	Breed
Kullenjra, Punjab	
Mattewara, Punjab	
Kolkapura, Punjab	
Kotulpur Goat cum Fodder Farm, Murakata, Kotaipur, Bankura	Goat (Black Bengal)
Goat Farm under WBLDC, Hainghata Farm, Mohanpur, Nadia-West Bengal	Goat (Black Bengal)
Dairy Goat Farm Rajbagh, Jammu	Beetal Goat 327
Goat breeding centre, Dhoni, Kerala	1. Malabari, 2. Attapatti Black, 3. Boer 4. Sirohi, 5. Beetal
Goat breeding centre, Puthur, Kerala	Malabari

Private Goat Breeding Farm

Name of the Farm	Breed
Raajdeep goat farm, vill - shivalpurjoshi - Bailpokhra (Ramnagar) Distt. Nainital	Barbari, Pantaza, Sirohi, Totapari, Local breads
Mohd Rashid, Star Goat Farm Vrindawan, Mathura, UP	Barbari goats
Ganesh Ram, VPO Dhodhsar, distt Jaipur, Rajasthan	Sojat, Totapuri
Ajay Parihar, UTTRAKHAND ORGANIC GOAT FARM, Village Mujholi Tehsel Ranikhet, Distric Almora, Uttrakhand	Sirohi

Sawai Singh, Village Narwa, dist. Jodhpur ,Rajasthan.	Sirohi
Bhagwan Singh Arya, bharatpur	Barbari
Krishna Kumar A N, Vistara Goat Farms , 158, Padmaupadya Layout, Nagadevanahalli, Kengeri, Mandya District, BengaluruKarnataka.	Beetal
Deepak Patidar , Goatwala Farm, Village Sundrel, Tehsil Dharampuri , Distt. Dhar MP	Sirohi, Sojat , Barbari, Beetal
Sudhir NavnathFunde, Kamdhenu Agro Animals, Gat no 164 Waghud Post Dhanora Ta MalkapurDistBuldhana Maharashtra	Osmanabadi

INDICATIVE LIST OF FARMS FOR SHEEP GERMLASM

Government Sheep Breeding Farms

S. No.	Sheep/Goat breeding farms in Jammu division	Breed
1.	Govt. sheep breeding and research farm Reasi/Zaban, Jammu	Rambouillet sheep
2.	Govt. sheep breeding farm Panthal, Jammu	Rambouillet and Dorper sheep
3.	Govt. Sheep Breeding Farm Thathri, Jammu	Rambouillet sheep
4.	Govt. Sheep Breeding Farm Billawar/Sarthal, Jammu	Rambouillet sheep
5.	Govt. Sheep Breeding Farm Balnoi, Jammu	Rambouillet sheep
6.	Govt. Sheep Breeding Farm Chanderkote, Jammu	Rambouillet sheep
7.	Central Garole Sheep Project, State Livestock Farm, Kalyani, Nadia, West Bengal	Sheep (Garole)

Private Sheep Breeders having Sheep and Goat flocks in Jammu Division

S. No.	Sheep/Goat Breeders Name and Address	Breed
1.	Sh. Haji Nizam Din Khatana S/o Haji MohdZubairSurinsar/Birpur, Jammu (Summer HQ SaiNallah/Warwan), Jammu	Cross BredRambouillet sheep and Kaghani Goats
2.	Sh. Haji Junaid S/o Haji MohdZubair, Surinsar/Birpur Jammu (Summer HQ SaiNallahWarwan), Jammu	Cross BredRambouillet Sheep and Kaghani Goats
3.	Sh. Main Altaf Ahmed S/o Main Bashir Ahmed , Mehtka (Kalakote)/ Lam (Nowshera)/Thandapani (Sunderbani) Rajouri (Summer HQ Kangan), Jammu	Cross BredRambouillet Sheep and Kaghani Goats
4.	Sh. Ishtiaq S/o MohdHussain, Diani, Samba (Summer HQ Kainthal/ Kargil), Jammu	Cross Bred, Rambouillet Sheep and Kaghani Goats
5.	Sh. MohdSadiqkhatana S/o Abdul Rashid Khatana, Ratnuchak, Samba (Summer HQ SaiNallah/Warwan), Jammu	Cross BredRambouillet Sheep and Kaghani Goats
6.	Sh. Iqbal Phambra S/o Suba	Cross BredRambouillet Sheep and Kaghani Goats

INDICATIVE LIST OF FARMS FOR PIG GERMLASM

Government Pig Breeding Farms

S. No.	Name of the Farm	Breed
1.	Chhaju-Majra-Mohali, Punjab	Large White Yorkshire
2.	Nabha – Patiala, Punjab	Large White Yorkshire
3.	Malwal – Ferozepur, Punjab	Large White Yorkshire
4.	Sadda – Gurdaspur, Punjab	Large White Yorkshire

5	Kheowal – Hoshiarpur, Punjab	Large White Yorkshire
6	Pig Breeding Farm under WBLDC Hainghata Farm, Mohanpur, Nadia, West Bengal	Large White Yorkshire, Duroc, Landrace
7	Pig Breeding Farm under WBLDC, Mohitnagar, Jalpaiguri, West Bengal	Large White Yorkshire, Duroc, Landrace
8	Pig Breeding Centre, KLD Board, Ernakulam, Kerala	Large White Yorkshire, 2. Landrace 3. Duroc ,4. LW Yorkshire x Landrace cross, 5. Landrace x Duroccross,6. LW Yorkshire x Duroc cross 7. Three way crosses

Private Pig Breeding Farms

S. No.	Name of the Farm
1.	Dhaliwal pig farm sangrur, Punjab
2	HarpreetsinghBathinda, Punjab
3	Jasvir Singh Sangrur, Punjab
4	Jagdeep Singh SAS Nagar, Punjab
5	Kunal Sharma, Diamond Swine breeders village Shankar Distt Jalandhar, Punjab
5.	Virender Singh @ Ghuman Pig Farm Dera Baba Nanak, Gurdaspur, Punjab
6.	Khullar Pig Farm, Muktsar Road , Ferozepur, Punjab
7.	Ranjit Pig Farm, Village Joner, Ferozepur, Punjab
8.	Noorpur Pig Farm, Village Noorpur, Sethan, FZR, Punjab
9.	Manjit Pig Farm, Village MaanSinghwala, Muktsar Sahib, Punjab
10.	Machhibagra Pig Farm, Village Machhibagra, FZR, Punjab
11.	Sulhani Pig Farm, Village Sulhani, FZR, Punjab
12.	Sandeep Pig Farm, Village Jaimalwala, FZR, Punjab
13.	Rakesh Pig Farm, Zira, FZR, Punjab
14.	Avtar Singh, SalapurRopar, Punjab
15.	Shamlal, Mundi Kharar Mohali, Punjab
16.	Jasbir Singh , Sector -23 D CHD
17	Jashandeep Singh, Rajpura, Patiala, Punjab
18.	Amteshwar, Mohali, Punjab
19.	Karam Chand, Ropar, Punjab
20.	Darshan, SialbaMajri, Punjab
21.	Kultar Singh, Chand purbela, Ropar, Punjab
22.	Anil, Derabesi, Mohali, Punjab
23.	Akashdeep Singh, Shekpur, Mohali, Punjab
24.	Deepak Soharta, Bojheri, Mohali, Punjab

Major Fodder seed producing agencies

Sl. No	Name
01	ICAR-Indian Grassland and Fodder research Institute, Jhansi, Uttar Pradesh
02	State Agriculture Universities (63 numbers)
03	National Seeds Corporation Limited
04	State Seeds Corporation Limited (13 nos.)
05	Krishi Vigyan Kendra (722 nos.)

06	Milk Unions/ Cooperatives (18 States)
07	Regional Fodder stations, Hissar, Chennai, Jammu and Kashmir, Hessarghata (Bangalore), Kalyani (West Bengal), Suratgarh (Rajasthan), Hyderabad, Dhamrood.
08	BAIF Limited
09	JK Trust. Thane Maharashtra

Note: The aforementioned lists are indicative and not an exhaustive one. The Department may, on request add the list. The procurement of materials/ inputs is at the buyer's responsibility.

Livestock Health & Disease Control Programme National Animal Disease Control Programme (NADCP) Foot and Mouth Disease (FMD) and Brucellosis



4

Livestock Health & Disease Control Programme (LHDCP)

- ***National Animal Disease Control Programme (NADCP)***
- ***Foot and Mouth Disease (FMD) and Brucellosis***

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***National Animal Disease Control Programme (NADCP)
Foot and Mouth Disease (FMD) and Brucellosis***

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Operational Guidelines

For the Implementation of Livestock Health & Disease Control Scheme 2021-2022



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

Abbreviations

1.	ACS: Additional Chief Secretary
2.	AH: Animal Husbandry
3.	AHS: African Horse Sickness
4.	AI: Artificial Insemination
5.	ASCAD: Assistance to States for Control of Animal Diseases
6.	AVD: Actual Vaccination Date
7.	BPU: Biological Production Unit
8.	BSE: Bovine Spongiform Encephalopathy
9.	BVO: Block Veterinary Officer
10.	CBPP: Contagious Bovine Pleuropneumonia
11.	CSF: Classical Swine Fever
12.	CSF-CP: Classical Swine Fever Control Programme
13.	CSS: Centrally Sponsored Schemes
14.	CSSNIAH: Chaudhary Charan Singh National Institute of Animal Health
15.	CVE: Continuous Veterinary Education
16.	DA: Dearness Allowance
17.	DAHD: Department of Animal Husbandry and Dairying
18.	DDL: Disease Diagnostic Laboratory
19.	DMU: District Monitoring Unit
20.	EAT module: Expenditure, Advance and Transfer module
21.	ESVHD: Establishment and Strengthening of Veterinary Hospitals and Dispensaries
22.	FMD: Foot and Mouth Disease
23.	GeM: Government e-Marketplace
24.	GFR: General Financial Rules
25.	GLP: Good Laboratory Practices
26.	GMP: Good Manufacturing Practices
27.	GOI: Govt. of India
28.	HOD: Head of the Department / Division
29.	HQ: Headquarters
30.	IA: Implementing Agency

Abbreviations

31.	ICAR: Indian Council of Agricultural Research
32.	IEC: Information, Education and Communication
33.	INAPH: Information Network for Animal Productivity and Health
34.	LDB: Livestock Development Board
35.	LH&DC: Livestock Health & Disease Control
36.	LH: Livestock Health
37.	MVU: Mobile Veterinary Unit
38.	NADCP: National Animal Disease Control Programme
39.	NADRS: National Animal Disease Reporting System
40.	NE: North East
41.	NGO: Non-Government Organization
42.	NIVEDI: National Institute of Veterinary Epidemiology and Disease Informatics
43.	NPRSM: National Project on Rinderpest Surveillance and Monitoring
44.	NSC: National Steering Committee
45.	OIE: Office International des Epizooties
46.	PED: Professional Efficiency Development
47.	PFMS: Public Financial Management System
48.	PPR: Peste des Petits Ruminants
49.	PPR-EP: Peste des Petits Ruminants Eradication Programme
50.	PRRS: Porcine Reproductive and Respiratory Syndrome
51.	SIA: State Implementing Agency
52.	SMU: State Monitoring Unit
53.	SNA: State Nodal Agency
54.	SOP: Standard Operating Procedures
55.	TA: Travelling Allowance
56.	ToT: Training of Trainers
57.	UC: Utilization Certificate
58.	UID: Unique Identification
59.	UT: Union Territory
60.	VCI: Veterinary Council of India
61.	VS: Veterinary Services

OPERATIONAL GUIDELINES

1. Objectives

The overall aim of the Livestock Health & Disease Control scheme is to improve the animal health sector by way of implementation of prophylactic vaccination programmes against various diseases of livestock and poultry, capacity building, disease surveillance and strengthening of the veterinary infrastructure. It is envisaged that implementation of the scheme will ultimately lead to prevention & control, subsequently eradicating the diseases, increased access to veterinary services, higher productivity from animals, boosting trade in livestock and poultry, their products and improving the socio-economic status of livestock and poultry farmers.

The objectives of the Scheme are:

- a) To implement the Critical Animal Disease Control Programme to eradicate PPR by 2030 by vaccinating all the sheep and goats and to control Classical Swine Fever (CSF) by vaccinating the entire pig population
- b) To provide veterinary services at the farmers' doorstep through Mobile Veterinary Units (MVUs)
- c) To assist States / UTs for Control of Animal Disease (ASCAD) by prevention & control of important livestock and poultry diseases prevalent in different States / UTs as per the States' / UT's priorities

2. Outcomes

- a) Reduced risk to animal and human health
- b) Overall increase in livestock productivity by reducing the disease burden

3. Scheme Implementation Strategy

- a) State / UT to identify and designate suitable agency as SIA / LDB (preferably same as in NADCP)
- b) State / UT / SIA shall develop further guidelines for implementation of the Scheme delineating roles and responsibilities of all functionaries at different levels

3.1 Critical Animal Disease Control Programme

It is proposed to cover the following two critical diseases for its control and eradication through these components for saving losses to farmers.

3.1.1 Peste des Petits Ruminants Eradication Programme (PPR-EP)

- a) This component will cover the entire sheep and goat population in the country for carpet vaccination against Peste des Petits Ruminants (PPR), for 100% effective coverage of the entire eligible small ruminant population. Migrants' flocks / animals will also be covered under the vaccination programme. The sole objective of having the eradication programme for 4 years is to establish adequate herd immunity and ensure that the country becomes free from PPR.
- b) Manpower shortages in States can be met by incentivizing vaccinators and using Prani mitras / Pashu sakhis / Prani bandhus etc., besides Government Veterinary Services (VS).
- c) Animal identification shall be made using ear tags and registration on INAPH module as is done in National Animal Disease Control Programme for FMD and Brucellosis (NADCP). These would be a pre-requisite for any transaction involving small ruminants, including movement of animals across State / UT administrative boundaries.
- d) Surveillance mechanism shall be strengthened by ensuring compulsory reporting of clinical cases by State Veterinary Services. Also, ICAR-NIVEDI shall be responsible for epidemiology of PPR and its endemicity in pockets of the country so that adequate measures are taken.
- e) Awareness programmes shall be designed on the lines as done in NADCP in the States so that the beneficiaries are made aware of the threats of PPR, need for compulsory on-time vaccination and the sustainable bio-security measures necessary to prevent the spread of the disease amongst the flock of sheep and goats.
- f) Formats of reports prior to start of vaccination, quarterly report of vaccination and on completion thereof, as well as, of outbreak statement are annexed as Annexures 1A through 1D, which will need to be submitted by the State Implementing Agency.

3.1.2 Classical Swine Fever Control Programme (CSF-CP)

- a) CSF is enzootic in most of the pig producing States. The best possible remedial measure is vaccination of eligible animals. In view of the importance of the disease, causing huge loss to the piggery industry and small farmers, as well as the fact that piggery production has extended well beyond the NE Region, the dedicated control programme for control of CSF will be implemented as a national control programme to include all States / UTs for 100% effective coverage of the entire pig population.
- b) CSF-CP will be implemented in the whole country with the target being 100% of the eligible pig population
- c) Manpower shortages can be met by incentivizing vaccinators using Prani mitras / Pashu sakhis / Prani bandhus, etc., besides Government Veterinary Services (VS).
- d) To ensure vigil against occurrence of the disease, monitoring through active clinical surveillance shall be strengthened in conjunction with States / UTs. Reporting clinical cases by State VS is envisaged. Also, ICAR-NIVEDI shall be responsible for epidemiology of CSF and its endemicity in pockets of the country so that adequate measures are taken.
- e) Animal identification shall be made using ear tags and registering the animals on the INAPH module as is done in National Animal Disease Control Programme for FMD and Brucellosis (NADCP). These would be a pre-requisite in any transaction involving the pig population, including animal movement across State / UT administrative boundaries.

- f) Awareness programmes shall be designed on the lines as done in NADCP in the States / UTs so that the beneficiaries are made aware of the threats of CSF, the need for compulsory on-time vaccination and the sustainable bio-security measures necessary to prevent the spread of the disease amongst the population.
- g) Formats of reports prior to start of vaccination, quarterly report of vaccination and on completion thereof, as well as of outbreak statement are annexed as Annexures - 1A through 1D, which will need to be submitted by the State Implementing Agency.

3.2 Establishment and Strengthening of Veterinary Hospitals and Dispensaries (ESVHD) – Mobile Veterinary Units (MVUs)

- a) In order to increase accessibility of veterinary services at the farmers' doorstep, funds for Mobile Veterinary Units (MVUs) will be provided to the States / UTs under this scheme @ 1 MVU approximately for one lakh livestock population
- b) These MVUs will be custom fabricated vehicles for veterinary healthcare with equipment for diagnosis, treatment & minor surgery, audio visual aids and other basic requirements for treatment of animals. The vehicle would preferably be a four-wheeler van with enough space to accommodate the required equipment for diagnosis (microscope, portable X-ray machines, etc., wherever required), medicines, surgical equipment, sample collection and animal handling paraphernalia, working space for 1 veterinarian, 1 para-veterinarian and a driver-cum-attendant along with necessary equipment. A detailed indicative list of such support is give at Annexure 2C. However, depending upon the terrain, the State / UT may propose alternate vehicles which suit the outreach.
- c) Veterinary & public awareness paraphernalia - the MVU will have equipment for sample collection like vials, vacutainers, syringes, a small refrigerator / vaccine carrier / active cool box and medicines for treatment - including lifesaving drugs, antibiotics etc., cotton, bandages and minor surgery equipment and audio-visual aids like microphones, amplifiers, charts / photographs / slides of diseases and importance of prevention and pamphlets announcing the vaccination campaigns, a small projector / OHP, screen, if required.
- d) Each MVU will have one Veterinarian, one para veterinarian and one driver-cum-attendant
- e) The Mobile Veterinary Unit could run on PPP mode with the Government providing the infrastructure but manpower is outsourced by the Implementing Agency (including cooperatives and milk unions, etc.).
- f) These MVUs will provide veterinary services at the farmers' doorstep on the basis of phone calls received at the Call Centre from farmers of respective State / UT. The MVUs need to be positioned at strategic locations in order to minimize travel time and to provide service within the targeted time.
- g) A State / UT level Call Centre should also be set up / aligned with the existing Call Centre in each State / UT. Such Call Centres should be under the control of the State / UT Animal Husbandry Department with a Nodal Officer nominated by the State. The Call Centre should function as the pivot whilst rendering Mobile Veterinary Services. It should receive calls from livestock rearers / animal owners and transmit them to the Veterinary doctor at the Call Centre. The decision of directing the MVU would be on the emergent nature of the veterinary case as decided by the Veterinary doctor at the Call Centre. The Call Centre should also be responsible for monitoring the movement and use of the MVUs. The Call Centre should also confirm actual services rendered through the UID and mobile number of the animal owner and share the data with the State concerned. The Call Centre should also be responsible for communication with the local Veterinary Surgeon for

follow up treatment and registered local AI technician for AI. MVUs should also provide extension service through audio-visual aids contained in the MVUs to the local population so as to spread awareness of animal diseases, their prevention and control, requisite bio-security measures, economic advantages of livestock farming and efforts of the Government in this direction.

- h) Each State level Call Centre unit shall constitute 1 veterinarian and 3 call executives for around every 20 MVUs. For 100 MVUs, there will be 2 veterinarians along with 6 Call Executives and for each additional one hundred MVUs, 1 veterinarian & 3 Call Centre executives will be required.
- i) There will be provision for Mobile Van customized for veterinary healthcare (equipment for diagnosis, treatment and minor surgery including audio-visual aids) (@ Rs.16.00 lakh / van). This non-operating cost (i.e. cost of MVU) would be through 100% central funding.
- j) The recurring cost of running the MVUs is pegged at @ Rs.18.72 lakh / MVU and the Office expenses of running a Call Centre will be @ Rs. 5000/- pm for having a Call Centre consisting of 1 veterinarian & 3 Call Executives and an additional Rs. 2000 pm for each addition of 1 Veterinarian & 3 Call Executives. These will be on a Centre-State sharing basis as applicable (60-40 for all other States / 90-10 for NE & Himalayan States / 100% for UTs)
- k) Both, the recurring and the one-time capital cost given (of MVUs) are indicative and is subject to the tendered rates. Flexibility for transfer of funds from one component to any other component is envisaged as per exigencies.

3.3 Assistance to States for Control of Animal Diseases (ASCAD)

- a) It will have activities for vaccination against economically important diseases of livestock and backyard poultry duly prioritized by the State / UT as per the disease(s) prevalence and losses to the farmers. Due importance shall also be given to vaccination against zoonotic diseases like anthrax and rabies for which assistance shall be given to the States / UTs as per proposals received from them.
- b) Another activity that has been prioritized is 'Control of Emergent and Exotic Diseases'. This activity includes surveillance and related activities to check ingress of exotic diseases as well as emergent / re-emergent livestock / poultry diseases. Assistance shall also be given for ring vaccination to inhibit the spread of the diseases (in cases of disease outbreaks) as well as towards payment of compensation to farmers for culling of poultry birds, elimination of infected animals, destruction of poultry feed /eggs, including operational costs.
- c) A third activity under the ASCAD component is 'Research & Innovation, Publicity & Awareness and Training & allied activities. While Publicity & Awareness and Training, etc. are existing activities under the extant ASCAD component, 'Research & Innovation' is a newly proposed activity. Under this it is envisaged that funds may be released to recognized private / public Institutions, other Ministries / Departments, etc. for collaborations in research & innovations / training / capacity building / crisis management and mock drills, etc.
- d) Grant-in-aid to Veterinary Council of India (VCI), expenses for election, legal, etc. in respect of VCI would continue to be funded under this component.
- e) Hiring Consultants, professional services, advertisement and publicity at the headquarters will be with 100% central assistance under ASCAD.

4.

Programme Components, Activities and roles of Central & State / UT Governments

4.1 Critical Animal Disease Control Programme

4.1.1 Peste des Petits Ruminants Eradication Programme (PPR-EP)

4.1.1.1 Role of the Central Government

- a) Funding for Animal identification through tagging (from NADCP)
- b) Funding for cold chain infrastructure including ILRs, cold cabinets, vaccine carriers etc. (from NADCP)
- c) Funding of the Vaccination cost including vaccine, accessories (needles, syringes, cotton, sterilizer, disinfectant etc.) - @ Rs. 4.50 / animal (tentative)
- d) Funding of the Vaccination and data uploading remuneration @ Rs. 2/dose (indicative). Remuneration may be revised as per ground requirement
- e) Funding for the cost of vaccines (either central procurement or through States / UTs), vaccination cost (accessories) is subject to the tendered rates. Flexibility for transfer of funds from one component to any other component is envisaged as per exigencies
- f) Funding IEC / Awareness - All blocks at Rs. 5000 / year
- g) Funding for the cost of consumables and facilitating sero-monitoring / sero-clinical surveillance through ICAR Institutes, State laboratories – costs as per demand
- h) Support in training vaccinators wherever possible in cooperation with the Rural Development Department, etc.
- i) Funding for De-wormer (through ASCAD / NADCP) : as per availability of funds
- j) Sharing detailed SOPs for vaccination and other components including content for developing awareness / publicity material
- k) Formulating Guidelines / SOPs for ensuring the quality of vaccines and assisting designated laboratories including ICAR institute(s) concerned for quality control of vaccines, sero-monitoring / surveillance as prescribed.
- l) Maintaining INAPH database / arranging for ToTs for INAPH uploading
- m) Appointing a Central Survey Agency to monitor implementation by surveying beneficiaries (a provision under NADCP)

4.1.1.2 Role of the State / UT / State Implementing Agency (SIA) / Livestock Development Board / other Implementing Agencies (IAs)

- a) The State / UT Action Plan drawn up in consultation with all relevant stakeholders to be submitted through the concerned SIA
- b) States / UTs to submit Annual Action Plan for carrying out vaccination covering 100% of the sheep & goat population along with previous Utilization Certificate (UC) and physical & financial progress report
- c) States / UTs shall ensure adequate manpower by engaging Prani mitras / Pashu sakhis / Prani bandhus; their training, and enrollment on INAPH

- d) Identification of target animals by ear tagging, registration and uploading the data of tagging and vaccination in the Animal Health module of Information Network for Animal Productivity and Health (INAPH)
- e) Publicity and mass awareness campaigns at the State, block and village levels including orientation of State functionaries for programme implementation
- f) Procure accessories well in time before commencement of actual vaccination
- g) States / UTs shall arrange for logistics like vaccine procurement / vaccine receipt and onward distribution at the field level ensuring cold chain continuity
- h) Undertake deworming preferably one month prior to AVD
- i) Vaccinating the entire susceptible population of small ruminants (sheep and goats) on annual basis (mass vaccination against PPR) including nomadic sheep / goat population above 4 months of age and healthy, non-pregnant animals
- j) Maintaining records of vaccination
- k) Investigation, virus isolation and characterization during outbreaks in close cooperation with other Implementing Agencies (IAs) like ICAR Institutes / designated laboratories concerned to draw up proposals for sero-monitoring projects and collection of samples etc. and assisting them as required.
- l) Testing of pre-vaccination and post-vaccination samples or as prescribed in the sampling plan by ICAR
- m) Recording / regulating animal movements through temporary quarantine / check- posts
- n) Generation of data and regular monitoring including evaluation of the impact of the programme
- o) Creation of an emergency response team during outbreaks
- p) States / UTs to submit physical performance report along with outcome & output, indicating disease outbreak status during the year

The indicative format for model annual State/UT action plan for PPR-EP is annexed at **Annexure – 1**.

4.1.2 Classical Swine Fever Control Programme (CSF-CP)

4.1.2.1 Role of Central Government

- a) Funding of Animal identification through tagging (from NADCP)
- b) Funding of Cold chain infrastructure including ILRs, cold cabinets, vaccine carriers etc. (from NADCP)
- c) Funding of Cost of vaccine (either central procurement or through State)
- d) Funding of Vaccination accessories cost (needles, syringes, cotton, sterilizer, disinfectant etc.)
- e) Funding of Vaccination cost including vaccine, accessories - @ Rs. 32.50/dose (indicative)
- f) Funding of Vaccination and data uploading remuneration @ Rs. 2/dose (indicative)
- g) Cost of vaccines, vaccination cost (accessories) are subject to the tendered rates. Flexibility for transfer of funds from one component to any other component is envisaged as per exigencies
- h) Funding of IEC / Awareness - @ Rs. 5.00 lakh per State / UT annually

- i) Funding for strengthening of laboratories – @ Rs10.00 lakh for non-recurring cost and Rs. 3.00 lakh for recurring cost per State / UT annually
- j) Support in training vaccinators wherever possible in cooperation with Rural Development Department, etc.
- k) Funding for De-wormer (through ASCAD / NADCP) : as per availability of funds
- l) Sharing detailed SOPs for vaccination and other components including content for developing awareness / publicity material
- m) Formulating Guidelines / SOPs for ensuring quality of vaccines and assisting designated laboratories including ICAR institute(s) concerned for quality control of vaccines, sero-monitoring / surveillance, as prescribed.
- n) Maintaining INAPH database / arranging for ToTs for INAPH uploading
- o) Appointing a Central Survey agency to monitor implementation, surveying the beneficiaries (provision under NADCP)

4.1.2.2 Role of the State Government / UT / State Implementing Agency (SIA) / Livestock Development Board / other Implementing Agencies (IAs)

- a) State / UT to identify and designate suitable agency as SIA / LDB (preferably the same as in NADCP) who shall further develop guidelines for implementation of the Scheme, delineating roles and responsibilities to all functionaries at different levels
- b) States / UTs will be responsible for procurement / receipt of vaccines, procurement of accessories (syringe, needles, gloves, mask etc. for use in vaccination), payment of remuneration to vaccinators, uploading data on INAPH, sero-monitoring and surveillance as prescribed, strengthening of laboratories and awareness campaigns & training, etc.
- c) States / UTs / SIAs to submit an Annual Action Plan in consultation with the relevant stakeholders for carrying out vaccination covering 100 % of the pig population along with the previous Utilization Certificate (UC) and giving physical & financial progress report.
- d) States / UTs will conduct awareness campaigns for implementation of CSF-CP in their respective States / UTs. The awareness campaigns may include advertisements on radio, in local newspapers, wall paintings, banners, announcements, etc.
- e) States / UTs will procure accessories on time, as per their action plans
- f) States / UTs will arrange for logistics like vaccine procurement / vaccine receipt and onward distribution at the field level ensuring cold chain continuity
- g) States / UTs shall undertake deworming preferably one month prior to AVD
- h) Vaccinating the entire susceptible population of pigs above 3 months of age and healthy, non-pregnant animals
- i) The details of vaccination are to be uploaded on the INAPH portal
- j) States / UTs will identify their respective laboratories to be used for sero-monitoring / surveillance and the same will be strengthened to enable carrying out the necessary tests for CSF during the implementation of this programme
- k) Testing of pre-vaccination and post-vaccination samples
- l) Generation of data and regular monitoring including evaluation of the impact of the programme

- m) Creation of an emergency response team during outbreaks
- n) States / UTs to submit physical performance report along with outcome & output, indicating disease outbreak status during the year

The indicative format for model annual State action plan for CSF-CP is annexed at **Annexure – 1**.

4.2 Establishment and Strengthening of Veterinary Hospitals and Dispensaries (ESVHD) – Mobile Veterinary Units

4.2.1 Role of the Central Government

- a) Providing Non-recurring Funds for Customized Mobile Vans for veterinary healthcare (@ Rs.16.00 lakh / van) – 100% central assistance
- b) The recurring cost for running of MVUs is pegged @ Rs.18.72 lakh / MVU and Office expenses of running the Call Centre will be @ Rs. 5000/- pm and an additional Rs. 2000 pm for each additional Veterinarian & 3 Call Executives. These will be on a Centre-State sharing basis, as applicable (60-40 for all other States / 90-10 for NE & Himalayan States/ 100% for UTs).
- c) Both, recurring and the one-time capital costs given (of MVUs) are indicative and are subject to the tendered rates. Flexibility for transfer of funds from one component to another is envisaged as per exigencies.

4.2.2 Role of the State Government / State Implementing Agency (SIA) / Livestock Development Board / other Implementing Agencies (IAs)

- a) Each State / UT / SIA / LDB shall send action plan as per the format in the guidelines.
- b) The State shall provide for State share for the recurring costs and set up a State Nodal Agency (SNA), as per guidelines for the centrally sponsored component
- c) Each State / UT will establish a Call Centre having call executives and veterinarians. The Call Centre unit shall constitute 1 veterinarian and 3 call executives for every 20 MVUs. For 100 MVUs, there will be 2 veterinarians along with 6 Call Executives and for additional each hundred MVUs, 1 veterinarian & 3 Call Executives will be required
- d) Veterinary services like treatment, minor surgeries, de-worming, dressing, dehorning, pregnancy diagnosis, dystocia, vaccination, artificial insemination, etc. will be provided
- e) Animal owner / family could call on the designated number of the Call Centre. Call Centre Executive will collect information from caller and will enter in the system. The system will generate a unique ID for each case. The veterinarian at the Call Centre will prioritize the cases. The calls will be followed up with the identified vehicle and the available MVU will be deployed (expected time of arrival automatically displayed in the system) to the caller's place. Veterinary Doctor / para-veterinarian will provide the necessary veterinary service
- f) Call Centre veterinarian will take a call on escalation from Call Executives or AI technician or MAITRI or para veterinarian for online advice
- g) AI technician or MAITRI shall log into the system every day before 9:30 AM indicating their availability for delivery of service on that day

- h) Government Veterinary institutions providing services to callers who are located within a 2 Km radius identified by the State Animal Husbandry Department (Nodal Officer) shall log into the system every morning indicating the timing of availability of service in that institution on that day. If the caller is from such villages, the Call Centre shall request caller to approach that particular institution for service. In case of emergencies, Mobile Veterinary Unit, comprising the veterinarian, shall be dispatched.
- i) Each and every case attended by the AI technician or MAITRI and /or the Mobile Clinic shall give their closure report immediately after the service is rendered and shall return to their base location as decided by the State. This shall close the call cycle.
- j) State / UT may, however, decide dispatching the MVU on a certain route to supplement routine treatment, awareness campaign and other services, if adequate emergency calls are not received / anticipated, for optimal utilization of mobile veterinary services.
- k) State / UT shall submit the financial / physical performance report as per requisite format.
- l) The model annual State / UT action plan for MVU-ESVHD is annexed at **Annexure-2**. Formats of quarterly reports of MVUs on delivery of veterinary service at farmers' doorstep are annexed at **Annexure-2A**. The tentative recurring costs for MVU and Call Centre may be seen at **Annexure-2B**.

4.3 Assistance to States for Control of Animal Diseases (ASCAD)

4.3.1 Vaccination against economically important livestock and poultry diseases

- a) States / UTs will submit their respective requirement for release of funds on the basis of prevalence of economically important diseases in their respective States / UTs for release of central share in the indicative format for action plan for implementation of ASCAD, annexed at **Annexure-3**
- b) Ring vaccination against emergent or exotic diseases will also be considered under this vaccination programme
- c) State will ensure availability of corresponding State's share so that release of central share may be utilized effectively in time

4.3.2 Surveillance and Monitoring of important livestock and poultry diseases

- a) In order to control livestock & poultry diseases, surveillance and monitoring of diseases is essential. The country is free from diseases like CBPP and BSE. In order to maintain freedom status of these diseases each country has to submit a dossier every year to OIE. The dossier is prepared on the basis of the inputs provided by the States. The activities which were being taken under NPRSM are to be taken up now under ASCAD. The funds provided under the component has to be utilized for TA / DA & POL /material collection and dispatch of samples to the designated laboratories:
 - (i) Physical surveillance in case of CBPP – village search, stock route search and institutional search are on the lines of Rinderpest.
 - (ii) Collection and dispatch of samples in case of BSE – the brain samples from bovines are to be collected and sent to the designated laboratories for testing.
- b) As activities of "NADRS", a component of the earlier LH & DC Scheme, has now been merged with the ASCAD component, States / UTs will continue to report incidences of livestock & poultry diseases as earlier, periodically, for reporting to OIE and financial assistance will now be provided under the "strengthening of disease diagnostic laboratories", a component of ASCAD.

4.3.3 Control of emergent & exotic livestock and poultry diseases

- a) For strengthening disease control, State Biological Production Units are to comply with Good Manufacturing Practices (GMP) and disease diagnostic laboratories are to comply with Good Laboratory Practices (GLP). This requires attention. The State / UT Government Disease Diagnostic Laboratories are to be strengthened in terms of infrastructure as well as availability of funds to meet the recurring & non-recurring expenditure.
- b) State Animal Disease Diagnostic Laboratories will be provided financial assistance for carrying out surveillance for emergent or exotic animal diseases. Routine collection of serum / sample materials for surveillance work and activities against exotic and emergent diseases including Avian Influenza, BSE, Glanders, PRRS, etc. are to be undertaken.
- c) In case such incidences / outbreaks are observed, the States / UTs will initiate prompt action for all disease control measures as per advisories including culling & elimination of infected birds / animals and destruction of feed / eggs for which financial assistance will be provided by the Centre to meet the expenses for operational costs and compensation to farmers.

4.3.4 Research & Innovation, Publicity & Awareness, Training etc.

- a) Research & Innovation (100%) - ICAR Institutes / other institutes will be provided financial support to carry out desired activities under research and innovations in the field of animal health
- b) Publicity & Awareness - All States / UTs will emphasize on publicity & awareness programmes at the block level for creation of awareness among the farmers about the animal disease control programmes of the Government and the risk of zoonotic diseases
- c) States / UTs will provide /arrange for continuous veterinary education (CVE) programmes for training of veterinarians, para veterinarians, others / training of trainers, training of laboratory diagnostic specialists / mock drills for bird flu, etc.
- d) Grant-in-aid for VCI
- e) Engaging Consultants – 5 Nos. at HQ for assisting in implementation of LH & DC programme

The indicative format for Action Plan for implementation of ASCAD is annexed at **Annexure-3**.

4.3.5 Role of the Central Government (Providing Funds)

- a) Livestock and Poultry vaccination (60-40 for all other States / 90-10 for NE & Himalayan States / 100% for UTs)
- b) Vaccines and vaccination costs including deworming (60-40 for all other States / 90-10 for NE & Himalayan States / 100% for UTs)
- c) Control of Emergent & Exotic Diseases (60-40 for all other States / 90-10 for NE & Himalayan States / 100% for UTs)
 - (i) Support to State DDLs / BPU
 - (ii) Surveillance - as per demand
 - (iii) Compensation - @50% as per demand
- d) Research & Innovation (100% Central assistance) - as per demand

4.3.6 Role of the State Government / State Implementing Agency (SIA) / Livestock Development Board / State Government / other Implementing Agencies (IAs)

- a) States / UTs / SIAs to send action plan as per format given in these guidelines
- b) States to provide for State share for the recurring costs
- c) States / UTs shall ensure adequate manpower engaging Prani mitras / Pashu sakhis / Prani bandhus; their training, etc.
- d) States / UTs shall arrange for logistics like vaccine procurement / vaccine receipt (in case of central procurement) and onward distribution at the field level ensuring cold chain continuity
- e) Procure accessories on time as per their action plans.
- f) Undertake de-worming wherever applicable
- g) Ensure vaccination on-field
- h) Coordination with other Implementing Agencies (IAs) like ICAR Institutes / laboratories concerned to draw up proposals for surveillance and collection of samples
- i) Recording / regulating animal movements through temporary quarantine / check-posts
- j) Creation of an emergency response team during outbreaks; coordinate in investigation, virus isolation and characterization during outbreaks
- k) Submit financial / physical performance report along with outcome & output, indicating disease outbreak status during the year

4.4 Activities requiring effective linkages

Vaccine and Vaccination - in order to obtain the desired immunity by vaccination against diseases viz. PPR, CSF and other economically important diseases of livestock & poultry, activities like de-worming of livestock & poultry, supportive medicine and vitamin & mineral supplements will also be taken care of under NADCP / ASCAD by providing financial assistance to States / UTs. De-worming before vaccination will help to get better immune response. De-worming shall be done twice a year, preferably with the vaccination programme, but 3-4 weeks before such vaccination.

For working out the vaccine requirements and vaccination schedule district-wise as well as the timelines for this activity, the indicative format for model annual State action plan for PPR-EP and CSF-CP, at Annexure-1, shall be referred to.

List of indicative items / components for financial proposals under PPR-EP / CSF-CP are annexed at **Annexure-1F** which will have to be sent by the State Implementing Agency as part of the State Action Plan.

The procurement of vaccines / anthelmintics shall be done by the State / UT Implementing Agencies / Livestock Development Boards, preferably through GeM or by tendering, following all the codal / legal provisions and financial rules and regulations.

4.5 Animal Identification

100% central assistance shall be provided to NDDDB and States / UTs for capturing data of tagging and vaccination through the Animal Health Module of INAPH and ear tagging, respectively.

The envisaged outcome of implementation of the 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, but under INAPH module, will not be tagged again.

Information Network for Animal Productivity and Health (INAPH) portal of the 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.

4.6 Publicity and awareness

Wide publicity about the programme shall be given in such a way so that the message of importance of vaccination, disease control and prevention reaches the target beneficiaries. Emphasis shall be given to the economic impact of livestock health on the rural economy. Both print and electronic media such as television, radio, community radio, newspapers, posters, leaflets, wall paintings, banners, etc., shall be used, both for general awareness and for awareness of the upcoming vaccination campaigns, especially vaccination dates, controlled movement of animals and importance of diseases 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.

4.7 Sero-monitoring, Sero-/ clinical surveillance, Vaccine testing etc.

The designated / identified Central / State / ICAR / University laboratories will carry out sero-monitoring, sero-/ clinical surveillance and vaccine testing, wherever required. The detailed SOPs for quality control of vaccines etc. will be worked out with subject matter specialists and shared with the relevant stakeholders. The details of the formats for collection and submission of samples for sero-monitoring are annexed at **Annexure 1E** which will have to be filled up by the State Implementing Agency after collection of all the samples for sero-monitoring for a particular district.

4.8 Convergence of components of LH&DC and NADCP

Under National Animal Disease Control Programme (NADCP), cold chain infrastructure in States / UTs is being strengthened. This is not only meant for FMD and Brucella Vaccines but this infrastructure may be used for other vaccines including PPR and CSF.

Similarly, de-worming may be done and for it, resources will be pooled / drawn from NADCP / ASCAD.

The facility for concurrent monitoring through the central survey agency for verifying from farmers, vaccination done etc. for NADCP currently will also be extended to PPR and CSF vaccination.

5. Central-State Fund Sharing Pattern

5.1 Critical Animal Disease Control Programme

5.1.1 PPR Eradication Programme (PPR-EP)

100% central assistance to States / UTs would be provided for cost of vaccines, accessories for vaccination, remuneration to vaccinators, strengthening of laboratories, recurring expenditure for laboratory consumables, sero-monitoring, surveillance and IEC / awareness campaigns, etc.

5.1.2 Classical Swine Fever Control Programme (CSF-CP)

100% central assistance to States / UTs would be provided for cost of vaccines, cost of accessories for vaccination including remuneration to vaccinators, strengthening of laboratories, recurring expenditure for laboratory consumables, surveillance and sero-monitoring, IEC / awareness campaigns, etc.

5.2 Mobile Veterinary Units (MVUs) under ESVHD

Under this component, 100% central assistance is proposed for the non-recurring expenditure on customized mobile vans / vehicles for providing veterinary healthcare which are fully equipped with equipment for diagnosis, treatment, surveillance sample collection, performing minor surgeries and audio-visual aids for extension activities.

The recurring expenditure on running (operating) the mobile vans / vehicles (MVUs), Call Centre and the outsourced manpower services shall, however, have a Central-State fund sharing pattern of 60-40 for all other States / 90-10 for NE & Himalayan States / 100% for UTs.

5.3 Assistance to States for Control of Animal Diseases (ASCAD)

This component shall have a Central-State fund sharing pattern of 60-40 for all other States / 90-10 for NE & Himalayan States / 100% for UTs. However, for the activity 'Research & Innovation, Publicity & Awareness, Training and allied activities', 100% central assistance would be provided. The grant-in-aid to the Veterinary Council of India (VCI) and expenses for the headquarters (election expenses, legal expenses, etc.), which were funded earlier under the Professional Efficiency Development (PED) component of the extant LH & DC scheme, would now be continued in the present LH & DC scheme under the ASCAD component. Further, provision for hiring consultants, professional services and advertisement and publicity would be made with 100% central assistance under this component.



6. Implementation and Monitoring

6.1 Procedure for Implementation

The States / UTs shall submit proposals to the Department of Animal Husbandry and Dairying (DAHD) through their State Monitoring Unit (SMU) after due approval of the Chairman, SMU.

While submitting proposals to the DAHD, the SMU should ensure that the proposal is complete in all respects and should also attach the Financial and Physical Progress Report and Fund Utilization Certificate as per format GFR-12A [Under Rule 238(1)] of GFR 2017 in case of funds released to SIA and as per format GFR-12C [under Rule 239] in case of funds released to the States, in either case, duly approved and countersigned by the Secretary, AH Department-cum-Chairman, SMU.

The proposals once received by the DAHD shall be appraised by the division and then the same shall be put before the National Steering Committee for approval and consideration for release of funds.

After getting funds released from the Central Government, the State Monitoring Unit shall regularly submit Monthly Progress Reports by the 5th of every month.

6.2 Monitoring

6.2.1 National Level

- a) Monitoring of the scheme shall be done by the National Steering Committee (NSC) headed by Secretary, Department of Animal Husbandry and Dairying (DAHD). NSC will comprise the following (in line with NADCP)

Secretary, Department of Animal Husbandry and Dairying (DAHD)	Chairperson
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 Husbandry from participating States	Member
Director, CSSNIAH, Baghpat	Member
Joint Commissioner (LH)	Member Secretary

- b) NSC will oversee activities of the LH&DC Scheme, give overall direction and guidance, monitor and review its progress and performance.
- c) NSC will be empowered to lay down and amend operational guidelines, other than those affecting the financing pattern. NSC will be responsible for approval of State Action Plans for funding under the LH&DC scheme received from IAs / States. Projects will be appraised by DAHD officials before putting them to NSC for approval.

- d) NSC would have powers to modify physical and financial targets based on review, approve inclusion and change eligibility criteria for Implementing Agencies and other guidelines including project area, composition of NSC, component structure and re-appropriation proposals. NSC will be fully empowered to make changes and delegate powers necessary for smooth implementation of the Programme. This Committee will meet twice a year or as frequently as may be required. The Chairman of NSC will have powers to approve the aforementioned conditions and adjustments to the scheme in anticipation of approval of NSC, in case the next meeting of NSC is delayed.

Internal Monitoring

- e) It shall be done through frequent review meetings at all levels and submission of monthly reports to the next higher authority culminating with the DAHD, GOI.

6.2.2 State / UT level

6.2.2.1 State Monitoring Unit (SMU) - State / UT Department of Animal Husbandry shall monitor the programme through State / UT 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. The SMU may co-opt any other member(s) as deemed necessary from State / UT government agencies / departments and Panchayati Raj Institutions for effective implementation of the programme. The Commissioner / Director, Animal Husbandry Department shall function as the Member Secretary of the SMU.

The SMU shall monitor and review progress and performance of all activities of the scheme. Chairman of SMU is empowered to approve the Annual Action Plans submitted by the State Government and forward them to the Central Government for sanction / release of funds

The SMU shall oversee and finalize the process related to scheduling the vaccination and other logistics required for vaccination and ensure that all vaccine doses and logistics are available before the start of the vaccination round. It will ensure arranging for accessories, logistics, cold chain continuity of vaccines, trained manpower, awareness creation, diagnostic facilities at all laboratories engaged in the sero-monitoring / surveillance work, regulate movement of animals wherever required, liaison with concerned ICAR laboratories / ICAR-NIVEDI, etc. for sero-monitoring / surveillance. SMU shall evaluate the impact of the programme and constantly review the progress of the project. SMU shall submit the vaccination / ear-tagging daily reports and any other progress report of vaccination to GOI as per the prescribed format

SMU shall ensure recording the details of vaccinated animals and informing such vaccinations to the animal owners.

SMU shall ensure strict compliance of the provisions under Prevention and Control of Infectious and Contagious Diseases of Animals Act, 2009 and rules thereunder, either notified by the 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.

6.2.2.2 District Monitoring Unit (DMU) - The DMU shall be headed by the District Magistrate as Chairman of the DMU. It 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 Joint Director / Deputy Director / District Veterinary Officer, Animal Husbandry Department shall be the Convener of the District Monitoring Unit (DMU).

The DMU, as the main executive unit in the entire implementation programme in the district, shall be responsible to ensure the following : a) The required vaccines and requisite logistics for vaccination including manpower for vaccination, accessories, cold chain infrastructure, vaccine carriers are in place well before the start of the vaccination programme; b) Execution of vaccination in the entire district as per schedule and prescribed procedures; c) Collection of sera samples for sero-monitoring d) Vaccinated animals are registered in INAPH animal health module database; e) Animal identification and documentation; f) Investigate any suspected outbreak and arrange to send specimens for laboratory confirmation; g) Training of staff engaged in vaccination / programme well before the start of the programme; h) Prepare calendar of operations with the help of the District Animal Husbandry Officer and Block Officers; i) Mass education / awareness campaigns on PPR amongst livestock farmers emphasizing the economic impact of the diseases and benefits likely to accrue by preventive vaccination of their animals as well as the timely reporting the disease in case of suspicion / occurrence in the district. DMU shall compile the epidemiological information and data of the vaccination programme and various reports to submit to the SMU as per the schedule.

DMU, with the help of the District Polyclinic, shall co-ordinate with the respective Disease Investigation Laboratories to send suitable samples of suspected material, collect vaccination sera samples for sero-monitoring, wherever required, etc.

6.2.2.3 Block Monitoring Units / Block Veterinary Officers (BVOs) shall provide information about the control programme, its importance and impact on the villagers through discussions, leaflets, pamphlets, posters, visual aids during training and awareness programmes, etc.; ensure reporting any unusual health status of animals, particularly for reportable diseases; in case of suspicion of outbreak or confirmation of PPR outbreak, BVO shall implement all necessary control and containment measures immediately and also report the suspected / confirmed outbreak; send samples to designated laboratories in case of suspected diseases, ensure ear tagging and that ear tagging personnel are well-trained; supply vaccine to field officers as per the schedule of vaccination. Appropriate disposal of used / waste materials or any other bio-medical waste generated also needs to be ensured by the BVOs. Monitoring through PRIs for ensuring accountability may also be done.

6.2.3 Concurrent Monitoring (through Survey Agency)

The Call Centre set up at DAHD and States / UTs shall be responsible for monitoring implementation of the various components 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).

6.2.4 State ranking for devolution of funds under LHDCP

The funds under LHDCP shall be regulated strictly as per the performance of various activities undertaken by the States / UTs, the major indicators would be as under:

- Priority to the States having a large number of livestock population and the international border States
- Unspent balance and accrued interest return
- Physical Performance of activities in terms of financial outgo

- Control and containment of diseases and timely reporting of outbreaks and control thereof;
- Timely Tagging and registration of animals on INAPH.
- Updating of data on Integrated Reporting System for various vaccinations viz. FMD, Brucellosis, PPR, CSF; their sero-monitoring and sero-surveillance etc.



Fund Flow Mechanism

The 100% Centrally funded components shall be disbursed to Implementing Agencies (SIAs, Research Institutes, etc.) and Centrally sponsored funds (with State share) shall be disbursed to States / UTs, through Public Finance Management System (PFMS) of the Government of India.

<p>Central Sector Components</p> <p>Funds to be disbursed for all the components of the Scheme on 100% grant-in-aid basis – for the entire PPR-EP, CSF-CP, one-time Capital assistance for Mobile Vans under ESVHD-MVU, research & innovation, publicity & awareness, training of Veterinarians, Para-veterinarians / Training of Trainers / Training of veterinary professionals (CVE)</p>	<p>Centrally Sponsored Components</p> <p>Funds to be disbursed for : i) Immunization of livestock & poultry, vaccines and vaccination costs under ASCAD, ii) Surveillance and compensation costs for control of emergent & exotic diseases under ASCAD, iii) Strengthening of Disease Diagnostic Laboratories and Biological Production Units for disease diagnosis, surveillance related activities and production of vaccines, kits etc. under ASCAD and iv) Recurring expenditure for running the mobile vans / vehicles, call centres and the outsourced manpower services under ESVHD-MVUs</p>
<p>Implementing Agencies (IAs)</p> <p>State Livestock Development Boards* / State Implementing Agencies* / Central Institutes like CCS-NIAH, National Dairy Development Board / Indian Council of Agricultural Research (ICAR) and its Institutes / Central Universities, Veterinary Council of India (VCI), etc.</p>	<p>States / UTs through designated State Nodal Agencies</p>
<p>Disbursement of funds</p> <p>SIAs / IAs shall disburse the funds through PFMS for implementation and keep an account of the funds, provide appropriately signed Utilization Certificates, remit interest accrued etc. Manpower is to be outsourced by Implementing Agencies, wherever required.</p>	<p>Disbursement of funds:</p> <p>Funds for Centrally Sponsored Components of the LH&DC Scheme will be released to the State Government's RBI Account. Thereafter, the State Government needs to transfer the funds to the Account of the State Nodal Agency within 21 days and the State share to be released within 40 days. Detailed procedure for handling of funds for CSS Scheme may be followed as per extant Department of Expenditure, Ministry of Finance Guidelines.</p>

The major action points on the part of the States are as under:

- a) States have to designate SNA for LH&DC scheme (Centrally Sponsored components)
- b) States have to open Single Nodal Account of SNA and map it in PFMS
- c) States have to open zero balance subsidiary accounts of the IAs down the ladder
- d) States have to deposit 100% of the amount balance in the account of IAs in the Single Nodal Account of SNA
- e) IAs have to be registered on PFMS
- f) States have to open separate budget lines for Central and State shares of the CSS

** States / UTs may preferably retain the SIA / SLDB (as under NADCP) to ensure smooth flow of funds for 100% Central Sector Components of LH&DC scheme*

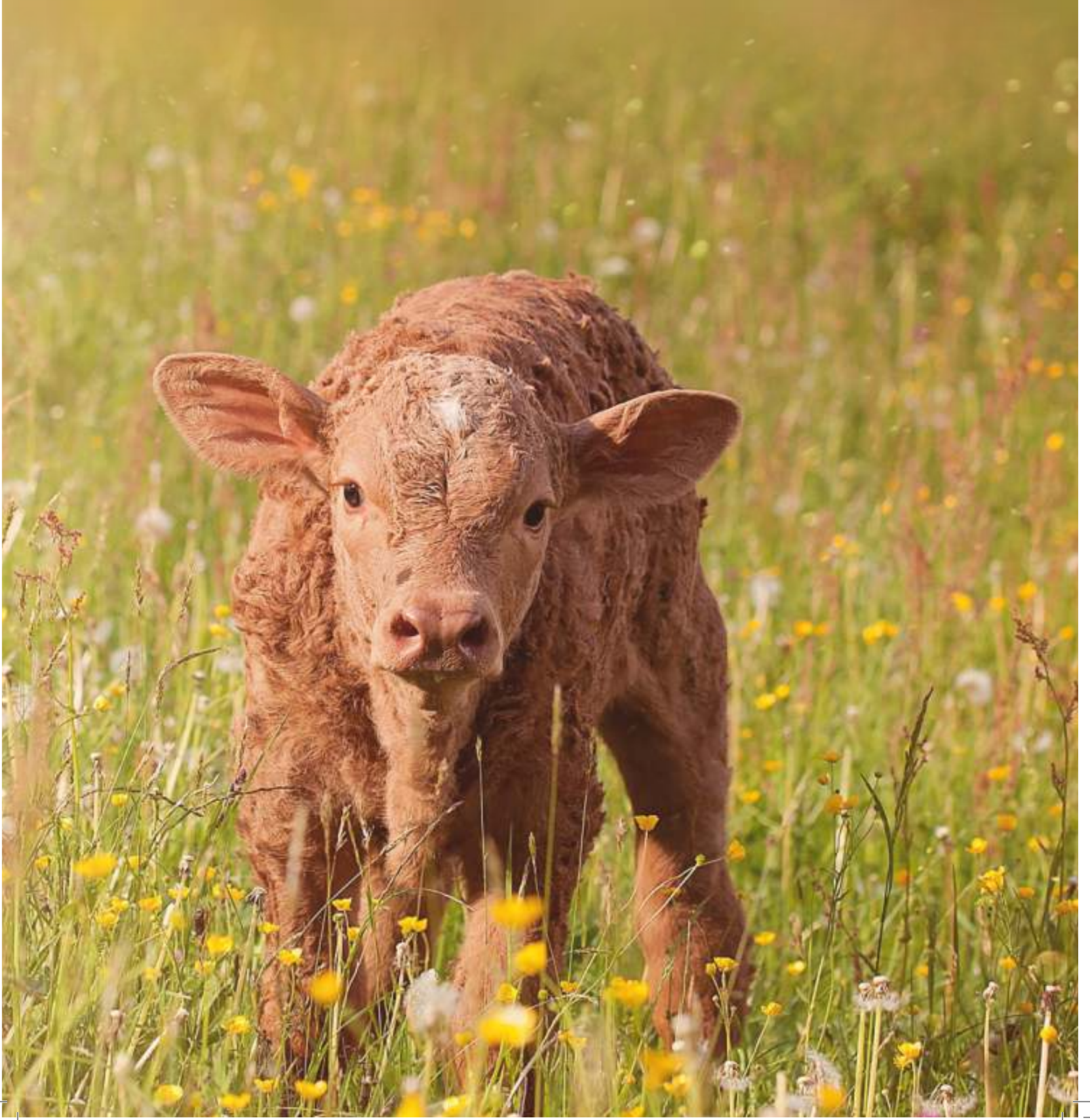
SIAs / IAs / State / UTs, Government Scientific and / or Research Institutes, etc., are to follow the codal and legal provisions of the GFR 2017 and enroll themselves in the PFMS. They shall book funds through PFMS following the Expenditure, Advance and Transfer (EAT) module. To familiarize themselves with the EAT module, the following link may be visited: <http://dst.gov.in/sites/default/files/EAT%20-%20FilingAllmoduleFinal.pdf>.

To ensure smooth flow of funds under 100% Central Sector Components of the LH&DC scheme from the Centre, States / UTs may retain the State Implementing Agency (SIA) as done under National Animal Disease Control Programme (NADCP), as the latter's bank accounts are already mapped under PFMS.

8. Evaluation

Evaluation of the programme at the end of two years (2023-24) and five years (2026-27) 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.

ANNEXURES



Annexure – 1

MODEL ANNUAL STATE ACTION PLAN FOR PPR-EP and CSF-CP

- Name of the Implementing Agency :
- Address :
- Telephone No. and Fax No. :
- Email ID of the HOD :
- Nodal Officer :

(All the animals in the district are to be covered in one schedule for each disease)

S#	Name of District	Population			No. of doses required			Expected vaccination start date		Expected vaccination end date	
		Goats	Sheep	Pigs	Goats	Sheep	Pigs	PPR	CSF	PPR	CSF

1. **Tagging requirement – as mentioned in NADCP guidelines**
2. **De-worming – covered under ASCAD / NADCP**
3. **Total manpower requirement :**

(Details regarding requirement of vaccinators for carrying out the vaccination)

Total manpower requirement for vaccination should be identified 15 days before AVD

S. No.	Name of Districts	No. of animals to be covered under vaccination		Total manpower required for vaccination	Manpower available for vaccination	Shortage / gap in No. of vaccinators	Hiring / outsourcing of manpower
1		Sheep,	Pigs				
2		Goats					
Total							

4. Activities to be taken up for public awareness – (Details of proposed awareness programmes, viz. Wall paintings / Banners / Posters / Audio-visuals / Radio advertisements, etc. at the State / District / Block / Village level)

State	Wall Paintings	Audio visuals including films	Radio advertisements	Posters	Banners/Hoardings	Public Announcements and distribution of pamphlets
	1 month before AVD	1 month before AVD	1 month before AVD	1 month before AVD on State transport buses, etc.	1 month before AVD	
District	-do-	15 days before AVD	-	1 week before AVD	1 week before AVD	-
Block	-do-	-do-	-	-do-	-do-	
Village	-do-	-do-	-	-do-	-do-	2 days before AVD

***AVD- Actual Vaccination Date**

5. Procurement procedure and supply of accessories: [Details about the procurement procedure to be followed to procure logistics for vaccination viz. vaccine (if procured by States / UTs), needles and syringes, gloves, aprons, etc.]

Items	Date of tender (to be at least 90 days before AVD)	Supply order to be at least 60 days before AVD	Date of expected actual availability to be at least 15 days before AVD		
			At State	At District	At Block
1) Vaccine (if procured by States / UTs): a) PPR vaccine b) CSF vaccine					
2) Needles and Syringes					
3) Gloves					
4) Aprons					
5) Discard Bags and other accessories					

6. Supply and distribution plan for vaccines

Items	Date of expected actual availability (supply and distribution)*		
	At District	At Block	At Village (Institution)
PPR Vaccine			
CSF vaccine			

7. Monitoring and Supervision Plan for PPR-EP / CSF-CP (Details of plans to monitor vaccination, cold chain maintenance at the field level)

- i. Establish Call Centre (to be established by State at least 7 days before AVD)
- ii. Monitoring by State Nodal Officer for each district (during and after vaccination - at least 2 visits during vaccination)
- iii. Vaccination to be supervised by Block Veterinarian
- iv. Vaccinators to register Name, UID (Aadhar No.)/Mobile No. of animal owner at the time of vaccination

Format of Report prior to start of PPR / CSF Vaccination

1. State/UT
2. Name of vaccination: PPR/ CSF
3. Date of reporting
4. Phase

S. No.	Name of District	Doses			Animal Identification				Logistics					
		Total No. of doses of vaccines required for this round as per population	Total No. of doses of vaccines available from the previous round of vaccination	No. of doses of vaccines required for next round (after deducting balance)	Target Animal Population	Tags available with States / UTs	Additional Tags required	Expected start date of tagging	Targeted animal population	Expected start date	Expected completion date	No. of vaccination teams in districts	Identification of animals for sera collection	Proposed publicity campaign
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

Signature

Name & address of the Reporting Office

Annexure - 1B

Format of Quarterly Report on vaccination under PPR-EP / CSF-CP

1. State/UT 2. Name of vaccination: PPR/ CSF 3. Date of reporting 4. Period under report 5. Phase												
Sl. No.	Name of District	Livestock population to be tagged	Livestock population to be vaccinated (Species-wise details)	Details of Progress								
				No. of animals vaccinated during the period under report	Progressive total of animals vaccinated	% coverage in current round	Wastage (No. of doses)	Balance doses of vaccination at the end of the day/ period	No. of animals tagged during the day / period under report	Progressive total no. of animals tagged	No. of sera samples collected during the day / period (village-wise details)	Progressive total of No. of sera samples collected
1	2	3	4	5	6	7	8	9	10	11	12	13
Signature												
Name & address of the Reporting Office												

Format of Report on completion of vaccination for PPR / CSF

1. State/UT 2. Name of vaccination: PPR/ CSF 3. Date of reporting 4. Period under report 5. Phase														
Sl. No.	Name of District	Vaccination							Doses				Manpower Utilization	
		Targeted animal population	No. of animals tagged	No. of animals vaccinated	No. of pre-vaccination sera samples collected	No. of post vaccination sera samples collected	Start date	Completion date	No. of doses of vaccines available at the beginning of vaccination	No. of doses received for current phase	Total doses	No. of doses at balance	No. of teams for vaccination	No. of man days to complete the programme
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Signature Name & address of the Reporting Office														

Annexure - 1D**Format of Outbreak Statement**

(To be sent after recovery from outbreak)

- | | |
|-------------------------------|--------------|
| 1) State / UT: | 2) District: |
| 3) Taluka: | 4) Village: |
| 5) Outbreak Details: | |
| 6) Date of Report: | |
| 7) Date of 1st case Noticed: | |
| 8) Date of last case Noticed: | |
| 9) Animal Population: | |

Sheep	Goats	Pigs

- 10) Number of animals vaccinated before outbreak:
 11) Vaccine Manufacturer:
 12) Batch number of vaccines used
 13) Number of animals affected:

Details	Sheep	Goats	Pigs
Vaccinated			
Unvaccinated			

- 14) Severity of disease: Severe / Mild / Moderate:
 15) Number of samples collected during outbreak:
 16) Virus Typing result:
 17) Source of infection
 18) Details of Economic losses due to:
 (i) Treatment :
 (ii) Death of animals :
 (iii) Production losses :
 (iv) Any other :
 19) Measures taken to control the outbreak:
 20) Any other relevant information:

Signature**Name & address of the Reporting Office**

Indicative Formats for Sero-monitoring

1. Sero-monitoring - details of collection of samples

S. No.	District	No. of villages selected for sample collection	No. of samples to be collected		
			0 day (Pre-vac)*	30 day (Post-vac)	Total

* if required, as per sero-monitoring plan

2. Format for submission of samples for sero-monitoring under PPR-EP / CSF-CP

State/UT: Taluka:			District: Village:			
Name of vaccination: PPR / CSF						
Round of vaccination:						
Vaccine manufacturer:						
Batch number of vaccines:						
Date of expiry:			Date of vaccination:			
Date of sample collection:			Pre / Post:			
Details of samples:						
No.	Farmers Name	Sample ID	Tag No.	Sex M / F	Animal Type	Age in years
1						
2						
3						
4						
5						
-						

Note: Clinical / Sero-surveillance sampling report will be indicated separately, if required.

Signature

Name & address of the Reporting Officer

Annexure - 1F

List of Indicative Items / Components for Financial Proposals Under PPR-EP / CSF-CP

S. No.	Component
1.	Vaccine for total sheep and goat population against PPR; and vaccine for the total pig population against CSF
2.	Vaccination Cost, for syringes, gloves, gumboots etc. (at Rs 2.50 per vaccination)
3.	Remuneration Cost to Vaccinator @ Rs. 2.00 per dose (including registration / uploading data on INAPH)
4.	Sero-monitoring / surveillance / quality testing of vaccine – at State laboratories / designated laboratory, etc. as per requirement for PPR and CSF
5.	Expenditure on Awareness Programmes : @ Rs. 5,000 / Block / Year for organizing awareness Camps including advertisement campaigns for PPR-EP and @ Rs. 5.00 lakh per State annually for CSF-CP
6.	De-worming, as far as possible, will be pooled / drawn from National Animal Disease Control Programme / ASCAD. Cold chain infrastructure along with Central Survey Agency for verifying vaccinations done by surveying farmers shall also be drawn from NADCP.

Note: Cost of vaccines and vaccination cost (accessories) are indicative and is subject to tendered rates. Flexibility for transfer of funds from one component to any other component is envisaged as per exigencies

Model Annual State action plan for MVU-ESVHD

- **Name of the Implementing Agency :**
- Address :
- Telephone No. and Fax No.
- Email ID of the HOD :
- **Nodal officer :**

S. No.	Parameters	Details
1	Whether MVUs available with the State / UT, if yes-how many	
2	How these are operated – by State directly or in PPP mode – give details	
3	How is the operation / proposed operation-on call basis; timing etc.	
4	How many number of MVUs allocated / area / livestock population	
5	No. of Mobile Veterinary Units required and basis	
6	How is it intended to run the vehicles – whether any preliminary option explored for running on PPP mode	
7	Requirement of Veterinarians / Para veterinarians (No.) – how are they planned to be engaged	
8	Status of Call Centre: whether already operating (Availability of staff and infrastructure); if not available how is it proposed to be set up and monitored by State / UT Government	
9	Establishment of Call Centre (to be established by State at least 7 days before operation)	
10	Expected date of MOU with service provider / revision of MOU, if not already there	
11	Procurement / availability by service provider, vehicle and its fabrication – expected date	
12	Procurement procedure and supply of medicines, accessories and other consumables / non-consumables to be maintained in MVUs	
13	Monitoring and Supervision Plan for MVU-ESVHD - (Details of plans to monitor availability of veterinary services at the farmers' doorstep and satisfactory treatment provided at the field level)	
	(i) Monitoring by State Nodal Officer for each District (Monthly basis - at least 1 visit)	
	(ii) Services rendered by Gopal Mitra / Pashu Sakhis to be supervised by Block Veterinarian	
	(iii) To register Name, UID (Aadhar No.) / Mobile No. of animal owner at the time of delivery of veterinary services	

Annexure - 2A

**Format of Quarterly Report on delivery of
Veterinary Services at the farmers' doorstep
under MVU-ESVHD**

1. State / UT
2. Name of Scheme / Programme: **MVU-ESVHD**
3. Date of Reporting
4. Period under report

S. No.	Parameters	Details/Information
1	No. of MVUs in service	
2	No. of Veterinarians	
3	No. of Para veterinarians	
4	Status of Call Centre for taking up calls, technical experts for attending calls and for forwarding to attending authority like MVU / Gopal Mitra / Local Veterinarian or Para-veterinarian	
5	No. of Calls received	
6	No. of calls /complaints attended	
7	No. of farmers provided veterinary services at doorstep	
8	No. of animals treated at the farmers' doorstep	
9	Details of the facilities maintained in the MVU	
10	Details of Medicines being maintained in the MVU	
11	Maintenance of Complaints / Feedback register in the MVU	
12	No. of preliminary diagnosis made using available diagnostic facilities	
13	Observation of any unusual mortality or spread of any infectious diseases in any particular area and action taken accordingly	

Signature

Name & address of the Reporting Officer

Annexure - 2B

Tentative recurring costs for MVU and Call Centre

- a. Recurring expenditure for running of one Mobile Van (60-40 / 90-10 NE & Himalayan States /100% UTs)

(Rs. in lakh)

Activity	No of personnel	Rate per month	Amount per month	For 1 year
Outsourcing of veterinarian	1	0.50	0.50	6.00
Outsourcing of Para-vet	1	0.20	0.20	2.40
Outsourcing of Driver-cum-attendant	1	0.18	0.18	2.16
Procurement of Medicines, Surgical material etc.	-	LS*	0.35	4.20
Maintenance & Fuel (Petrol /Diesel / Oil / Lubricant etc.)	-	LS*	0.33	3.96
TOTAL			1.56	18.72

* Lumpsum

- b. Recurring expenditure for running of Call Centre at State / UT level (60-40 / 90-10 NE & Himalayan States /100% UTs)

(Rs. in lakh)

Activity	No of personnel	Rate per month	Cost per year
Outsourcing of veterinarian	1	0.50	6.00
Outsourcing of call executive	1	0.15	1.80
Office expenses for running Call Centre @ Rs. 5000/- pm for 1 veterinarian and 3 Call executives and an additional Rs. 2000 pm for each addition of 1 Veterinarian & 3 Call Executives			

Annexure - 2C

List of indicative Items required in Mobile Veterinary Units

Instruments, machines, furniture etc.: Electronic weighing machine, small refrigerator / vaccine carrier, I/V stands, folding chairs, folding-table, sitting-stools etc., small animal examination table, animal restraining equipment, portable sterilizer / autoclave, OPD slips, stationery, cash-receipt books, electric fans, ropes, brooms, wipers, foot-mats, locks etc. small sized dispensing-vials, hoof-trimming set, sprayers, dog muzzles etc. There should be provision for desktop computer / GPS / Tab plus printer with internet broadband to send and receive various official reports, for updating the information of farmers' details and animal treatment. Movement of Mobile Clinics may be monitored online through the GPS system.

Minor Surgical equipment and supportive materials: Stethoscope, pre-anesthetic / anaesthetics, good quality steel scissors, forceps, disposable syringes and needles, pm set, PPE kit, I/V sets / cannula, scalp-vein sets, endotracheal tubes, naso-oesophageal tubes, suture materials and suture needles etc., surgical gloves, cotton, bandages, surgical / paper tape, Plaster of Paris bandage, teat instruments, set-plugs, bistouries, plasma expanders, DNS, NS, RL etc., magnifying glass, torch, gumboots, towels, aprons etc. Antiseptics and disinfectants: povidone solution, spirit solution, requisite antiseptic ointments, spray, antiseptic hand wash, hand sanitizers, phenyl, fly-repellents, oxidizing agents like potassium permanganate etc.

Medicines: Antibiotics, life-saving corticosteroids, antihemorrhagics, analgesics, antipyretics, antidiarrheals, antihistamines, anthelmintics, antiprotozoals, injectable and oral Haematinics, Inj. ascorbic acid, H2 receptor blockers / gastric anti-reflux agents, antiemetics, vitamin injections, liver extract, nasal, eye, ear drops, calcium injection, laxatives, purgatives, all vaccines especially anti-rabies, anti-venom depending on the area, intra-uterine bolus, anti-bloat, anti tympany, carminatives etc.

Vaccines: For using during campaigns, fill gaps or ring-vaccination during outbreaks (utmost precaution should be taken to travel through outbreak areas to prevent spread of infection through vehicle / personnel)

Sample collection material, rapid diagnostic kits: Syringes, blood collection tubes, (Vacutainer with EDTA, cloth activator), whirl pack, faecal sample collection containers etc.; rapid diagnostic kits as per requirement, microscope, slides

Audio-visual equipment: Notice Board, sound system / loud speaker, screen, small projector, publicity material / flyers etc.

**Format for Action Plan for implementation of
Assistance to States for Control of Animal
Diseases (ASCAD) under LH&DC**

1.	State / UT	
2.	Livestock population (species-wise)	
3.	Poultry population	
A	Livestock & Poultry Vaccination for control of economically important diseases The State / UT may identify important livestock & poultry diseases based on previous outbreak histories in different areas which cause economic losses to farmers and accordingly for prevention and control of such important diseases, vaccination programme may be proposed to GOI for release of the central share. The vaccination programme must be implemented timely so that there is a significant reduction of outbreaks / incidences of those diseases.	
	List of economically important including zoonotic diseases of livestock & poultry affecting the State / UT for the last three years along with No. of outbreaks	
	Details of vaccinations carried out against such diseases during the last three years - No. of doses	
6.	Targeted vaccinations during the year - No. of doses required of each required vaccine	
7.	Financial Requirement – Total: (Central Share + State Share)	
8.	No. of Disease Diagnostic Laboratories (DDL) in the State / UT	
9.	Strengthening: No. of DDLs strengthened during the last three years	
10.	No. of DDLs required to be strengthened during the year	
11.	Monthly Disease Reporting being undertaken for reporting to OIE - Status of Report Submission to GOI (Yes / No)	
12.	Financial Requirement for Strengthening and upgradation of DDLs. Total: (Central Share + State Share)	
B	Research & Innovation, Publicity & Awareness, Training, etc.: The State / UT will organize beneficiary (Livestock & Poultry Farmers) oriented camps and for wide publicity of the GOI / State Government scheme. The provision of primary treatment & diagnostic facilities as well as related activities may be provided using available Mobile Veterinary Units (MVUs) in these camps.	

Annexure - 3 Contd.

13	Details of Publicity & Awareness Camps organized @ Block level / District level / State level for the last three years
14	No. of farmers who attended Camps during the last three years
15	No. of animals treated in the camps during the last three years
16	No. of Camps to be organised during the current financial year
17	Training of Veterinarians, Para-vets, others / Training of Trainers / Training of veterinary professionals (CVE)/ Training of laboratory Diagnostic Specialists / mock drills for bird flu, etc.
18	Financial Requirement: Central Share & State Share
C	Control of Emergent & Exotic Diseases (60-40 / 90-10 NE & Himalayan States / 100% for UTs)
19	Routine collection of serum samples / sample materials for surveillance work and activities against exotic and emergent diseases including Avian Influenza, BSE, Glanders, PRRS etc. (up to max. Rs. 1.00 lakh per State / UT)
20	Payment of compensation to farmers for culling of birds / elimination of infected animals, destruction of feed / eggs including operational cost
21	Ring vaccination done, if any, details and proposed ring vaccination
22	Surveillance work and related activities undertaken during the last year and report thereof, to be enclosed
23	Surveillance work and related activities to be undertaken during current financial year
24	Activities to be undertaken under Research & Innovation with aims & objectives
25	Outcome of the activities undertaken under Research & Innovation during the last three years

For more details visit our website
<https://www.dahd.nic.in/lh-dc> or
 contact State Animal Husbandry Department



National Animal Disease Control Programme for Foot and Mouth Disease (FMD) and Brucellosis (NADCP)

1. BACKGROUND

1.1 India's livestock wealth (534.54 million) includes 192.48 million cattle, 109.85 million buffaloes, 148.88 million goats, 74.26 million sheep and 9.06 million pigs. India is the largest producer of milk globally with production of 187.74 million MT (2019).

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 paras.

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 (DAHD) : Chairperson

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 Husbandry from the participating States/UTs: Member

Director, CSSNIAH, Baghpat : Member

Joint Commissioner (LH) : Member

Joint Secretary (C&DD) & Mission Director (NADCP) : 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 (C&DD) & Mission Director (NADCP), 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 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 temperature monitor card, 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 temperature monitor card, 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 temperature monitor card, 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 Quality Testing concerning vaccines supplied by the designated laboratories
- 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
- l. 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 NDDDB (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 (NDDDB): This portal shall serve as the central database for animals registered uniquely on INAPH. 100% central funding would be provided to NDDDB 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 -

4.2.1.1 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 ex-officio 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.

States shall associate all the Hon'ble Council of Ministers and Members of Parliament with the programme in the districts they represent.

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 seromonitoring.
 - 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 seromonitoring. SMU shall also ensure that a result of seromonitoring is conveyed to PLA in time
 - l. 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

4.2.1.2 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).

Member of Parliament along with Member of Legislative assembly shall be invited for the inauguration programme. The programme shall be organized to create wide publicity in a simple manner.

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
- l. 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. 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

4.2.1.3 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 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)
 - l. 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 –

- vaccinating the entire susceptible population of bovines, small ruminants (sheep and goats) and pigs at six-monthly intervals (mass vaccination against FMD)
- primary vaccination of bovine calves (4-5 months of age)
- 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
- 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)
- maintaining record of vaccination through Animal Health cards
- serosurveillance/seromonitoring of animal population
- procurement of cold cabinets (ice liners, refrigerators, etc.) and FMD vaccine
- investigation and virus isolation and typing in case of outbreak
- recording/regulation of animal movement through temporary quarantine/ check- posts
- testing of pre-vaccination and post-vaccination samples
- generation of data and regular monitoring including evaluation of impact of the programme
- providing remuneration to vaccinator which should not be less than Rs.3/- per vaccination dose and Rs.2.5/- 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 livestock repeatedly 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 - 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.

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 Sl. 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 Sl. No. 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 NDDDB 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 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 and mechanism decided by department for quality testing 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 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 serosurveillance 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 foetus /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.

Table1: Details of work plan with technical indicators for NADCP–FMD

S No.	Items of Work Plan	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 under taken) 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) BE 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 checkposts in strategic location at inter-state boundaries

Table 2: Details of vaccination for FMD

Description of animal	Vaccination schedule
YoungAnimals	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
AdultAnimals	Six-monthly vaccination as recommended under the programme
<p>FMD vaccine shall be kept constantly at a temperature between 2°C and 8°C</p> <p>The vaccine shall neither be frozen nor be exposed to temperature higher than 8°C</p> <p>The dose of vaccine used shall be as per the manufacturer's instructions which is at present 2 ml each for cattle, buffalo and pigs while 1 ml for sheep and goats</p> <p>Route – deep intramuscular (<i>Care must be taken not to rupture bigger blood vessels that may cause emboli in the blood stream</i>)</p>	

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

S No.	Items of Work Plan	Indicator
1	States to be covered	All States and Union Territories in the Country.
2	Animals to be vaccinated	100% vaccination coverage of bovine female calves of 4-8 months of age
3	Vaccination	Once in a life-time calf-hood vaccination
4.	Vaccine	Brucella S19
	<ul style="list-style-type: none"> • Brucella vaccine shall be kept constantly at a temperature between 2°C and 8°C • Use only the diluent provided with the vaccine for its reconstitution • The dose of vaccine used shall be as per the manufacturer's instructions which is at present 2 ml each for female cattle and buffalo calves <p>Route—sub-cutaneous (<i>Care must be taken not to vaccinate the rump region of the animal</i>)</p>	

Standard template for annual state action plan for National Animal Disease Control Programme (NADCP) for Foot and Mouth Disease

Name of the Implementing Agency-

Address-

Telephone No. and fax No. -

Email ID of the HOD-

Nodal officer –

1. Animal Population: (Species-wise (Nos.) and District-wise)

S. No.	Name of District	Cattle	Buffalo	Sheep	Goat	Pig
	Total					

2. FMD Vaccination and Outbreaks reported during last year –

(details of outbreaks District-wise for the last year)

S. No	Name of District	Date of last FMD vaccination carried out	No. of FMD outbreaks	Number of animals		
				Susceptible	Affected	Died

3. Proposed vaccine requirement and vaccination schedule district wise

(All animals in the district to be covered in one schedule)

S. No.	Name of District	No. of doses required for one round						Expected vaccination commencement date	Expected vaccination end date
		Cattle	Buffalo	Bovine calves for booster vaccination after primary vaccination	Goat@	Sheep@	Pig		

*Bovine calves should be given booster one month after primary vaccination (first time vaccination since birth)

@Dosage for goat and sheep is half of that in bovines and pigs

4. Tagging requirement and tagging schedule district wise (Tagging should be done with the vaccination schedule simultaneously)

Sl. No.	District	No. of tags and applicators required (100% coverage)						No. of tags & applicators available	Balance requirement of tags & applicators	Expected start date* of tagging	Expected end date of tagging
		Cattle	Buffalo	Sheep	Goats	Pigs	Total				

*Tagging schedule must coincide with the vaccination schedule at Sl. No. 3

5. Deworming - to be ensured 1 month before AVD (AVD = Actual Vaccination date)

6. Total manpower requirement:

(Details regarding requirement of Vaccinators for carrying out vaccination during vaccination campaign)

Total manpower required for vaccination should be identified one month before AVD

S.No.	ame of Districts	No. of Animals to be covered under vaccination	Total manpower required for vaccination	Manpower available with State Government for vaccination	Shortage/ Gap of vaccinators	Hiring/ Outsourcing of manpower
1						
2						
3						
TOTAL						

7. Training for manpower: (Details of training*# of Vaccinators for vaccination, ear tagging and registration in INAPH including institutions and module)

*Training Module duration (3 days) – Vaccination (1.5 days) / Ear tagging (0.5 days) / INAPH registration (1 day)

Training of all vaccinators should be completed at least 10 days before commencement of vaccination (refer para 3 above)

Sl. No.	Name of District	Institution selected for training at District / Block level	Manpower to be trained for vaccination, ear tagging and registration in INAPH (in nos.)

8. Training of Master trainers for INAPH(at least one per district)(Conduct of TOT with NDDDB) – To be completed at least 45 days before AVD

9. Training of trainers for INAPH (at least one per block)(Conducted by master trainers) –

To be completed at least 30 days before AVD

10. Creating district wise Masters in INAPH - At least 30 days before AVD

11. Activities to be taken up for public awareness – (Details of proposed awareness programmes, viz., Wall writing/ banners / Posters / Audio-visuals / Radio advertisement, etc. at State / District / Block / Village level)

	Wall writing	Audio-visuals including films	Radio advertisement	Posters	Banners / Hoardings	Public Announcements and distribution of pamphlets
State	1 month before AVD	1 month before AVD	1 month before AVD	1 month before AVD on State transport buses,	1 month before AVD	
District	-do-	15 days before AVD		1 week before AVD	1 week before AVD	
Block	-do-	-do-		-do-	-do-	
Village	-do-	-do-		-do-	-do-	2 days before AVD

12. Infrastructure plan for cold chain maintenance for FMD vaccine in districts / blocks under NADCP–

	S. No.
	Name of District
	No. of doses required for 100% coverage of vaccination of cattle, buffaloes, sheep, goat, pigs (including primary vaccination)
Z	Cold cabinets required for storage of vaccines at district level
○	
Z	Cold cabinets available for storage of vaccines at district level
○	
Z	Shortage of cold cabinets for storage of vaccines at district level
○	
	No. of institutions at block / village level available for further distribution
Z	Cold cabinets required for storage of vaccines at institution level (at block / village)
○	
Z	Cold cabinets available for storage of vaccines at institution level (at block / village)
○	
Z	Shortage of Cold cabinets for storage of vaccines at institution level (at block / village)
○	

	Tentative dates# of vaccination scheduled in a block / village
Z	Cold chain capacity required for vaccine distribution to vaccinators up to village level
○	(vaccine carriers)
Z	Cold chain capacity available for vaccine distribution to vaccinators up to village level
○	(vaccine carriers)
Z	Shortage of Cold chain capacity for vaccine distribution to vaccinators up to village level
○	(vaccine carriers)

13. Procurement procedure and supply of accessories: (Details about the procurement procedure to be followed to procure, logistics for vaccination viz. needle and syringes, gloves, apron, refrigerator, cold cabinets, walk - in coolers, etc.)

Items	Date of tender (to be at least 90 days before AVD)	Supply order (to be at least 60 days before AVD)	Supply order Date of expected actual availability to be at least 15 days before AVD		
			At State	At District	At Block
1) Needles and syringes					
2) Gloves					
3) Apron					
4) Refrigerators					
5) Cold cabinets (vaccine carriers)					
6) Walk-in coolers					
7) Ice-line cabinets					
8) Animal Health cards					
9) Discard bags and other accessories					

14. Supply and distribution plan for vaccines, tags and tag applicators

Items District	Date of expected actual availability (supply and distribution)*		
	Block	village (Institution)	
1) FMD Vaccine			
2) Ear tags			
3) Tag applicators			

*Vaccine doses should be available at District at least 10 days before AVD, Veterinary Institution at Block level 5 days before AVD and at Village level (Veterinary Institution) on the day of AVD

15. Seromonitoring Plan(details of collection of samples, preservation at field level, transportation to State laboratory, storage facility at state laboratory and finally to the Laboratory for seromonitoring)– ICAR – DFMD)

S. No.	District	No. of villages selected for sample collection	No. of samples to be collected		
			0 day (Pre-vacc)	30 day (Post-vacc)	Total

16. Serosurveillance (details of collection of samples, preservation at field level, transportation to State laboratory, storage facility at state laboratory and finally to the Laboratory for serosurveillance) – ICAR – DFMD)

S. No.	District	No. of villages selected for sample collection	No. of samples to be collected

17. Monitoring and Supervision Plan for NADCP-(Details of plans to monitor vaccination, cold chain maintenance at the field level)

- Establish Call Centre (to be established by State at least 7 days before AVD)
- Monitoring by State Nodal Officer for each district (during and after vaccination - at least 2 visits during vaccination)
- Vaccination to be supervised by Block Veterinarian
- Vaccinators to register name, UID (Aadhar no.) / Mobile no. of animal owner at the time of vaccination

18. Proposed Financial Requirement (Item-wise) as per approved Guidelines for NADCP-(Actual financial requirement for each item within the prescribed cost. Indicative items for reference are mentioned below at Annexure 1.a)

Annexure 1.a

LIST OF INDICATIVE ITEMS/COMPONENTS FOR FINANCIAL PROPOSALS UNDER NATIONAL ANIMAL DISEASE CONTROL PROGRAMME FOR FMD *

Sl. No	Component	1st Round	2nd Round	TOTAL
1.	Vaccination cost (Cost of vaccination and other logistics. This also includes at least Rs.3.00 per dose as incentive for vaccination and recording of animal details on INAPH)			
2.	Establishment / Strengthening of Check post to control movement of animals @ Rs 10 lakh per check post (with facilities for infrastructure for health check-up, vaccination, sample collection, ear tagging, registration, etc.)			
3.	Awareness campaign			
4.	Cost of ear tagging, registration on INAPH and Animal Health card			

*Cost towards vaccine, ear tag and applicator to be paid centrally through Programme Logistic Agency (PLA)

STANDARD TEMPLATE FOR ANNUAL STATE ACTION PLAN FOR NATIONAL ANIMAL DISEASE CONTROL PROGRAMME (NADCP) FOR BRUCELLOSIS

Name of the Implementing Agency-

Address-

TelephoneNo.andfaxNo.-

Email ID of the HOD-

Nodal officer-

1. Animal Population: (Species-wise (Nos.) and District-wise)

S. No.	Name of District	Bovine female calves (4-8 months of age)	
		Cattle	Buffalo
	Total		

2. Brucellosis Vaccination and Outbreaks reported during last year – (details of outbreaks District-wise for the last year)

S. No.	Name of District	Date of last vaccination carried out	No. of outbreaks	Number of animals		
				Susceptible	Affected	Died

3. Proposed vaccine requirement and vaccination schedule district wise

S. No.	Name of District	No. of doses required	Vaccination Schedule				
			Month with dates	Month with dates	Month with dates	Month with dates	Month with dates

4. Identification and Registration of animals for Brucellosis Vaccination (Tagging already done under NADCP-FMD / INAPH, which will be used for Brucellosis vaccination records)

5. Total manpower requirement: (Details regarding requirement of vaccinators for vaccination under NADCP – Brucellosis)

S. No.	Name of District	No. of Animals to be covered under vaccination	Total manpower required for vaccination	Manpower available with State Government for vaccination	Shortage/ Gap of vaccinators	Hiring/ Outsourcing of manpower
1						
2						
3...						
TOTAL						

6. Training for manpower: (Details of training*# of Vaccinators for vaccination, ear tagging and registration in INAPH including institutions and module)

*Training Module duration (3 days) – Vaccination (1.5 days) / Ear tagging (0.5 days) / INAPH registration (1 day)

Training of all vaccinators should be completed at least 10 days before commencement of vaccination (refer para 3 above)

S. No.	Name of District	Institution selected for training at District/ Block level	Manpower to be trained for vaccination, ear tagging and registration in INAPH (in nos.)

7. Activities to be taken up for public awareness – (Details of proposed awareness programmes, viz., Wall writing / banners / Posters / Audio-visuals / Radio advertisement, etc. at State / District / Block / Village level)

	Wall writing	Audio-visuals including films	Radio advertisement	Posters	Banners / Hoardings	Public Announcements and distribution of pamphlets
State	1 month before AVD	1 month before AVD	1 month before AVD	1 month before AVD on State transport buses, etc	1 month before AVD	-
District	-do-	15 days before AVD	-	1 week before AVD	1 week before AVD	-
Block	-do-	-do-	-	-do-	-do-	
Village	-do-	-do-	-	-do-	-do-	2 days before AVD

8. Infrastructure plan for cold chain maintenance for Brucellosis vaccine in districts / blocks under NADCP–

(The infrastructure available with the State or created under NADCVP-FMD to be used for Brucellosis vaccines under NADCP – Brucellosis)

9. Procurement procedure and supply of accessories: *(Details about the procurement procedure to be followed to procure, logistics for vaccination viz. needle and syringes, gloves, apron, etc.)*

Items	Date of tender (to be at least 90 days before AVD)	Supply order (to be at least 60 days before AVD)	Date of expected actual availability to be at least 15 days before AVD		
			At State	At District	At Block
1) Needles and syringes	AVD)	AVD)			
2) Gloves					
3) Apron					
4) Discard bags and other accessories.....					

10 Supply and distribution plan for vaccines

Items	Date of expected actual availability (supply and distribution)*		
	At District	At Block	At village (Institution)
1) Brucella Vaccine			

*Vaccine doses should be available at District at least 10 days before AVD, Veterinary Institution at Block level 5 days before AVD and at Village level (Veterinary Institution) on the day of AVD

11. **Seromonitoring Plan** *(details of collection of samples, preservation at field level, transportation to State laboratory, storage facility at state laboratory and finally to the Laboratory for seromonitoring)–ICAR –NIVEDI)*

S. No.	District	No. of villages selected for sample collection	No. of samples to be collected		
			0 day (Pre-vacc)	30 day (Post-vacc)	Total

12. **Serosurveillance** *(details of collection of samples, preservation at field level, transportation to State laboratory, storage facility at state laboratory)*

S. No.	District	No. of villages selected for sample collection	No. of samples to be collected

13. **Monitoring and Supervision Plan for NADCP-** *(Details of plans to monitor vaccination, cold chain maintenance at the field level)*

1. Call Centre of FMD would suffice
2. Vaccination to be supervised by Block Veterinarian
3. Vaccinators to register name, UID (Aadhar no.) / Mobile no. of animal owner at the time of vaccination

14. Proposed Financial Requirement (Item-wise) as per approved Guidelines for NADCP- *(Actual financial requirement for each item within the prescribed cost. Indicative items for reference are mentioned below at Annexure 2.a)*

Annexure 2.a

LIST OF INDICATIVE ITEMS/COMPONENTS FOR FINANCIAL PROPOSALS UNDER NATIONAL ANIMAL DISEASE CONTROL PROGRAMME FOR BRUCELLOSIS

S. No	Component
1.	Vaccination Cost for syringe, gloves, gumboots etc.
2.	Remuneration Cost to Vaccinator @ Rs.4.00 / dose
3.	Strengthening of ELISA Laboratories - One Time Assistance @ Rs.30.00 Lakh for only one Laboratory/State
4.	Expenditure on Consumables for ELISA laboratories @ Rs.20.00 lakh/Year
5.	Expenditure on Village level screening of samples: @ 2% of total Bovine Population i.e. for 60 Lakh samples @ Rs.5.00 / Sample
6.	Expenditure on Awareness Programme

Model Format of Animal Health Card cum Vaccination Certificate

Department of Animal Husbandry and Dairying
National Animal Disease Control Programme for FMD & Brucellosis
Animal Health Card cum Vaccination Certificate
Government of _____

Name of District: _____ Name of Village: _____

Name of Veterinary Institute: _____

Animal Details:

Animal UID No. _____ **Breed/Species:** _____

Male / Female _____ Age _____ Colour _____

Identification marks: _____

Details of Owner:

Name: _____ **Father's name:** _____

Full Address: _____

Aadhar Number: _____ **Mobile number:** _____

Issuing Official:

Name: _____ Designation: _____

Contact Number: _____ Date of issue: _____

Signature with Office seal

Important Instructions:

1. Vaccination card shall always be kept with the animal owner
2. Animal Health Card shall be carried during migration of livestock to any place or animal market
3. Animal Health Card shall be transferred to the purchaser (New Owner)
4. Newly purchased animal shall be vaccinated by contacting nearest Veterinary Institute
5. **Contact nearest Veterinary Institute for more details of FMD and Brucellosis vaccination**

Continued next page

Deworming Details

Deworming at six monthly intervals			
Date	De-wormer	Date	De-wormer

Vaccination Details**Foot and Mouth Disease (FMD)**

Vaccination No.	Batch number	Date	Signature of vaccinator	Vaccination No.	Batch number	Date	Signature of vaccinator
1				7			
2				8			
3				9			
4				10			
5				11			
6				12			

Brucellosis

Vaccination No.	Batch number	Date	Signature of vaccinator	Vaccination No.	Batch number	Date	Signature of vaccinator
1				7			
2				8			
3				9			
4				10			
5				11			
6				12			

National Programme for Dairy Development (2021-22) Operational Guidelines



5

National Programme for Dairy Development (2021-22) Operational Guidelines

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National Programme for Dairy Development 2021-22 - Operational Guidelines

F. No.4-9/2021-DP (E-19690)

Government of India

Ministry of Fisheries, Animal Husbandry and Dairying

Department of Animal Husbandry and Dairying

Krishi Bhawan, New Delhi

Dated: 3rd August 2021

Subject: Administrative approval for implementation of Central Sector Scheme “National Programme for Dairy Development” from 2021-22

The undersigned is directed to convey the Administrative Approval towards implementation of restructured Central Sector Scheme “National Programme for Dairy Development (NPDD)” with an allocation of Rs 1790.00 crore from 2021-22 to 2025-26.

1. National Programme for Dairy Development (NPDD) aims to enhance quality of milk and milk products and increase share of organised procurement, processing, value addition and marketing. This scheme has two (2) components:-

(i) The **Component ‘A’** focuses towards creating/strengthening of infrastructure for quality milk testing equipment as well as primary chilling facilities for State Cooperative Dairy Federations/ District Cooperative Milk Producers’ Union/SHG run private dairy/Milk Producer Companies/Farmer Producer Organisations.

The committed liabilities of ongoing NPDD scheme approved till 31.03.2021 shall be met under the revised scheme during first two years i.e. 2021-22 & 2022-23 as per administrative approval issued at the time of approval of respective projects.

(ii) The **Component ‘B’** provides financial assistance from Japan International Cooperation Agency (JICA) as per project agreement already signed with them. The central Government share in this project is proposed to be funded through NPDD.

2. A copy of the operational guidelines of NPDD (Component A & B) and brief description of activities to be taken up is **enclosed** herewith. The proposal may be prepared by furnishing requisite information as per prescribed factsheet and Annexure of the guideline. The project proposal of SIA duly recommended by State Government/SLTMC should be submitted to DAHD for consideration.

3. Implementation Mechanism:

3.1 At the apex level, there will be a Central Project Steering Committee (CPSC), headed by Secretary (AHD), GoI, which will provide policy and strategic support to the project, monitor the progress of approved projects of NPDD, consider annual action plans, give policy directions and shall have the authority to re-appropriate component-wise fund requirement in approved programmes, change the eligibility conditions and other terms and conditions of the agreements between stakeholders, implementation arrangement and can change the composition of committees viz. CPSC and PSC.

3.2 Project Sanctioning Committee (PSC) headed by Secretary AHD, GoI will have the authority to sanction projects after appraisal by Dairy division of DAHD. PSC will have power for re-appropriation of funds within the components/within the approved sub projects, change norms and change unit cost of items of the project. PSC will be responsible for consideration of proposals received from/recommended by SLTMC.

3.3 At the State level, there will be a State Level Technical Management Committee (SLTMC), which will be headed by Additional Chief Secretary/Principal Secretary/Secretary/Commissioner of the State, comprising representative of DAHD, SRLM, State Dairy Federation and NDDB as members for effective implementation and to have synergy among the similar dairy development programmes implemented in the State. SLTMC must ensure that there is no duplication of activities and project area in the States.

4. Participating States/State Implementing Agencies will submit quarterly progress reports (QPR), annual report, audit reports etc along with utilization certificate duly signed by Administrative Secretary of the concerned Department of the State Government in the prescribed formats. In case of release of last instalment under the project, consolidated utilization certificate, Quarterly progress Report, audit expenditure statement may be submitted. State Level Technical Monitoring Committee (SLTMC) meetings shall be held regularly to review the progress of project under intimation to this Department. The funds released under the project will be subjected to AG Audit of the concerned State.

5. This issues with the approval of Secretary (AHD) vide Note#16 diary No.E-19690 dated 29.07.2021.

Yours faithfully,

Encl.: a/a

(Deepak Sethi)

Under Secretary to the Government of India

Distribution:

1. Principal Secretary/Secretary, Department of Animal Husbandry/Dairy Development, All States and UT's
2. Advisor (PAMD), NITI Ayog, Agriculture Division, Yojana Bhawan, New Delhi
3. Chairman, National Dairy Development Board, Anand, Gujarat
4. Managing Director, Milk Federation, All States
5. Director, National Dairy Research Institute, Karnal, Haryana- 132001

6. Principal Accounts Officer, Ministry of Fisheries, Animal Husbandry & Dairying, Department of Animal Husbandry and Dairying, Jeevan Tara Building, Parliament Street, New Delhi-110001.
7. Chief Controller of Accounts Department of Animal Husbandry and Dairying, Krishi Bhawan, New Delhi-110001.
8. The Accountant General, Commerce, Works and Miscellaneous, AGCR Building, Near ITO, New Delhi-110 002.
9. Deputy Director General (Animal Sciences), ICAR, Krishi, Krishi Bhawan, New Delhi
10. Chief Representative, JICA India Office, Japan International Cooperation Agency (JICA), 16th Floor, Hindustan Times House, 18-20, Kasturba Gandhi Marg, New Delhi - 110 001, India
11. Director, National Rural Livelihoods Mission (NRLM), Ministry of Rural Development, Krishi Bhawan, New Delhi

Copy for kind information to:

1. PS to Hon'ble Minister, FAHD
2. PS to Hon'ble MOS (SKB), FAHD
3. PS to Hon'ble MOS (LM), FAHD
4. Sr.PPS to Secretary (AHD)
5. PPS to AHC
6. PPS to AS &FA
7. PS to JS(C&DD)/Dir (Budget)/DC(CS)/AC(DS)
8. US (Fin)/Guard File

1. Operational Guidelines for Implementation of National Programme for Dairy Development (NPDD)

National Programme for Dairy Development (NPDD) aims to enhance quality of milk and milk products and increase share of organised procurement, processing, value addition and marketing. This scheme has two (2) components.

1.1 The **Component 'A'** focuses towards creating/strengthening of infrastructure for quality milk testing equipment as well as primary chilling facilities for State Cooperative Dairy Federations/ District Cooperative Milk Producers' Union/SHG run private dairy/Milk Producer Companies/Farmer Producer Organisations

1.2 The **Component 'B'** provides financial assistance from Japan International Cooperation Agency (JICA) as per project agreement already signed with them. The central Government share in this project is proposed to be funded through NPDD.

1.3 The operational guidelines of Component 'A' and 'B' are given at **Appendix-I & II** respectively.

COMPONENT A

2. Area of Operation

2.1 Component A will be implemented throughout the country.

2.2 Component A will finance all components in States where Component B- Dairying through Cooperatives (DTC) under JICA assistance is not implemented.

2.3 In the case of States covered under Component B- DTC under JICA assistance, namely, Bihar and Uttar Pradesh, any addition of state shall be in compliance to the loan agreement between Government of India and Government of Japan. The Component A will cover those components that are not covered by DTC under JICA assistance.

3. Duration of the Project

National Programme for Dairy Development (NPDD) will be implemented throughout the country from 2021-22 to 2025-26 and will continue till 2027-28.

The committed liabilities of ongoing NPDD scheme approved till 31.03.2021 shall be met under the revised scheme during first two years i.e. 2021-22 & 2022-23 as per administrative approval issued at the time of approval of respective projects. Further, the committed liability to be created under above sub-schemes during the implementation period from 2021-22 to 2025-26, will be met through budgetary support during next two years i.e. 2026-27 & 2027-28.

4. Objective

- a. To create and strengthen infrastructure for quality milk including cold chain infrastructure linking the farmer to the consumer;
- b. To provide training to dairy farmers for clean milk production;
- c. To create awareness on Quality & Clean Milk Production;
- d. To support research and development on Quality milk and milk products

5. Institutional Arrangement, Implementing Agencies and Process Flow Charts

NPDD	Component A		
	Cooperative Sector	SHG run private dairy (registered under NRLM/ SRLM)	MPC and FPOs
Recommending authority (for submission of proposals)	State Level Technical Management Committee/ Additional Chief Secretary/Principal Secretary/ Secretary/Commissioner of the State (Dairy Development & Animal Husbandry Department) – Shall screen and recommend proposals to avoid duplication.		

NPDD	Component A		
	Cooperative Sector	SHG run private dairy (registered under NRLM/SRLM)	MPC and FPOs
State Implementing Agencies	All State Dairy Federations in States where Milk Federation is operating. For States where there is no State Level Milk Federation, cooperative Milk Union covering major area of operation shall be the State Implementing Agency	State Rural Livelihood Mission (SRLM), a registered society established by respective Department of Rural Development in States	National Dairy Development Board through State/Regional offices
End implementing Agencies	All State Dairy Federations and their constituent District/Taluka Level Milk Unions and farmer producer organisations, Government dairy/other registered Cooperative Unions (like dairy cooperatives registered under Multi State Coop. Act and Mutually Aided Cooperative Society Act etc.).	District Rural Development Authorities (DRDAs) operating at district level	Milk Producer Companies/ Farmer Producer organisations
Village level Participating Agencies	All dairy cooperative societies and other agencies associated or affiliated to above SIAs or EIAs like village level NGOs, SHGs, Universities, Colleges, ICAR Institutes etc.	All dairy processors and their feeder milk collection/ cooling/ chilling centres shall be eligible to receive assistance subject to the norms of the scheme	Milk Producer Institutions (MPIs)

5.1 Cooperative Sector:

State Dairy Federations for States viz Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Rajasthan, Tamil Nadu, Telangana, Uttar Pradesh, Uttarakhand, West Bengal; and Milk Unions in remaining States and UTs will be the State Implementing Agency and shall be responsible for implementation of the approved projects. However, above SIAs may make necessary arrangement to ensure implementation of specific activities under approved projects through concerned End Implementing Agencies (EIAs) operating at district/taluka level.

In case of Government dairy/other registered Cooperative Unions (like dairy cooperatives registered under Multi State Coop. Act and Mutually Aided Cooperative Society Act etc.), not affiliated/recognized by SIAs may directly forward their proposal through State Level Technical Management Committee (SLTMC) under the programme. However, central assistance for admissible components in such cases shall be released to the concerned State Implementing Agencies directly by GoI.

5.2 SHG run private dairy (registered under NRLM/SRLM)

State Rural Livelihood Mission (SRLM), a registered society established by respective Department of Rural Development in States will be the State Implementing Agency and District Rural Development Authorities (DRDAs) operating at district level shall be the End Implementing Agency for SHG run private

dairies. Government of India shall release financial assistance to respective SRLM, which in turn will release fund to District Level Rural Development authorities in respect of approved projects for SHG run private dairies.

5.3 Village level Participating Agencies (VPAs):

5.3.1 In Cooperative Dairy Sector, all dairy cooperative societies and other agencies associated or affiliated to above SIAs or EIAs like NGOs, SHGs, village level affiliated agencies of Universities, Colleges and ICAR institutions etc. shall be eligible to participate and receive assistance under the scheme.

5.3.2 In SHG run private dairy, all dairy processors and their feeder milk collection/cooling/ chilling centres shall be eligible to receive assistance subject to the norms of the scheme

6. Activity components to be funded

The list of the activities which will be funded under NPDD are as follows:

6.1 Milk Chilling facilities (including BMC) at primary level

6.1.1 Civil Work

6.1.2 Equipment for Bulk Milk Coolers & Accessories

6.2 Establishment of milk testing laboratories

6.2.1 At DCS/Village Level Laboratories/ at Bulk Milk Cooler (BMC) centers/At District Level Laboratories/ At State Level Laboratories including purchase of laboratory equipments as per FSS Act/Codex

6.2.2 Purchase of laboratory equipments (for chemical/ microbial (for district/union/state level) analysis of milk and milk products)

6.2.3 Purchase of laboratory furniture

6.2.4 System for quality assurance (HACCP/ISO) including equipment/computer hardware and software etc

6.3 Certification and accreditation

6.3.1 Certification for ISO/HACCP/Quality Mark etc.

6.3.2 Certifications as per Food Safety and Standards Regulation 2011

6.4 Information and Communication Technology Networking

Strengthening of all the cooperative dairies 30 TLPD and above in cooperative sector with the software systems like block chain, SAP, ERP for developing traceability, quality network etc.

6.5 Training & Farmer Awareness Programme

Under the training component of the scheme, focus will be on the following:-

6.5.1 Training of farmers in good hygienic practices/ good manufacturing practices

6.5.2 Training of Dairy Personnel/milk tester (including Plant and Marketing staff)

6.5.3 Training on Quality management systems.

6.5.4 Training of DCS staff/ BMC/ chilling centre/ AMCU/ DPMCU on operations and quality management

6.6 Planning and Monitoring

Under the planning and monitoring components, 2% (maximum) will be earmarked to meet the cost of preparation of project proposal, monitoring including field level inspections, review meetings, documentations (success stories, outcomes, concurrent evaluations, impact evaluation etc.).

6.7 Research & Development

6.7.1 Assistance to dairies of 1 Lakh Litre capacity and above

6.7.2 For development on new products, process automation, cost effective technology in processing, bio-degradable packaging technology, A2-Milk route scheduling, traceability system development, milk situation forecasting model, resource management including innovators and start-ups so that new innovation and research come up the sector.

7. Funding Pattern and Fund Flow:

7.1 FUNDING PATTERN

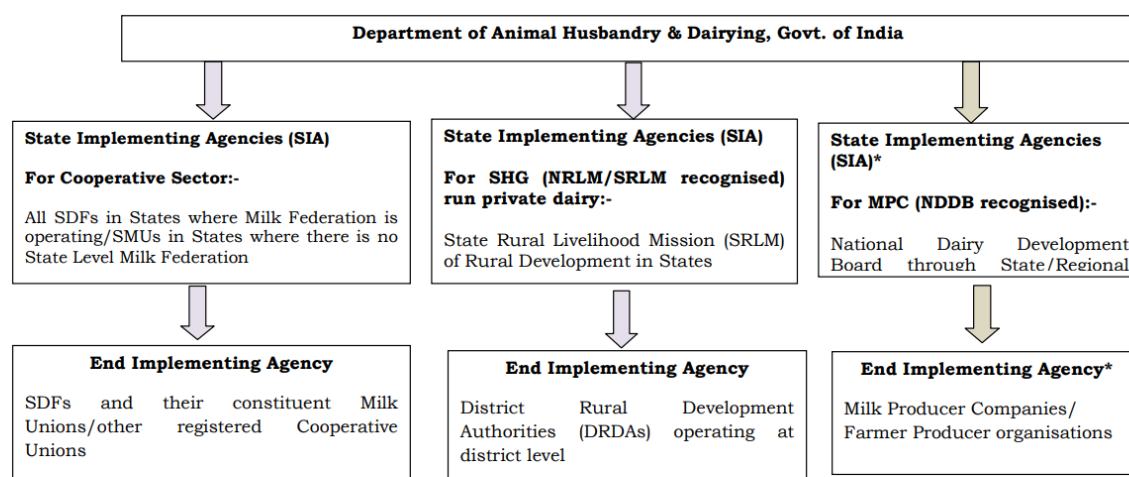
- a. 60:40 cost sharing basis between GOI and State/State Implementing Agency (SIA)/End Implementing Agency(EIA)
- b. 90:10 cost sharing basis between GOI and State/SIA/EIA for NER States and Hilly States.
- c. The Central assistance for UTs will be 100%.
- d. In case of SIAs/EIAs, wherever applicable, is unable to provide its matching share, the concern SIA/EIA may source its matching share from State Government or any other loaning agency subject to fulfillment of the norms of the concerned assisting/loaning organizations. Such loaning organisations/institutions include State Government, NCDC, and Commercial banks etc.
- e. As regard funding support for Research & Development, ICT networking, training, awareness and planning & monitoring the assistance would be 100%.

7.2 Fund Flow of Component-A of NPDD:

Under Component A of NPDD scheme instead of one State Nodal Agency, there will be three State Implementing Agencies for three different End Implementing Agencies. DAHD will release the fund to

these SIAs based on the project approved by PSC and subsequent progress reported by State/SIA.

Fund Flow - Component A (Flow Chart)



State Nodal Agency-State Milk Federation/Unions for Cooperatives, SRLM for SHG run private dairies and State/Regional Office of NDDB for MPC/FPOs

8. Implementation Mechanism

8.1 Central Project Steering Committee (CPSC)-

At the apex level, there will be a Central Project Steering Committee (CPSC), headed by Secretary (AHD), GoI, which will provide policy and strategic support to the project, monitor the progress of approved projects of NPDD, consider annual action plans, give policy directions and shall have the authority to re-appropriate component-wise fund requirement in approved programmes, change the eligibility conditions and other terms and conditions of the agreements between stakeholders, implementation arrangement and can change the composition of committees viz CPSC and PSC.

Secretary, DAHD	Chairperson
Financial Advisor, DAHD	Member
Animal Husbandry Commissioner, DAHD	Member
Deputy Director General (Animal Sciences), ICAR	Member
Principal Secretary/ Secretary, Department of Animal Husbandry and Dairy of States (one each from North, South, East and West)	Member
MDs of State Dairy Federations (one each from North, South, East and West)	Member
Chairman, NDDB or his nominee	Member
Managing Director/ Executive Director, NDDB	Member
Group Head (FPS), NDDB	Member
Director NDRI Karnal	Member
NRLM-Representative	Member
Representative from JICA as an observer	Member

Joint Secretary (CDD), DAHD

Member Secretary

8.2 Project Sanctioning Committee (PSC)

Project Sanctioning Committee (PSC) will be headed by Secretary AHD, GoI and will have the authority to sanction projects after appraisal by Dairy division of DAHD. PSC will have power for re-appropriation of funds within the components/within the approved sub projects, change norms and change unit cost of items of the project. PSC will be responsible for consideration of proposals received from/recommended by SLTMC. The PSC will meet quarterly or as frequently as necessary to ensure that proposals received through SLTMC are considered without unreasonable delay. The composition of PSC will be as under:

- i. Secretary, AHD, GoI –Chairman of the Committee
- ii. Financial Advisor, DAHD
- iii. Joint Secretary (Dairy Development), DAHD
- iv. Chairman, NDDB or his nominee not below the rank of Executive Director (ED)
- v. Executive Director / Group Head (FPS), NDDB
- vi. A representative from the concerned State Government and the State Dairy Federation would be an invitee while discussing the proposals pertaining to that particular state.
- vii. Representative from ICAR
- viii. Representative from Rural Development
- ix. Representative from NRLM/concerned SRLM
- x. Deputy Commissioner (DD) / Assistant Commissioner(DD) , GoI – Member Convener

8.3 Programme Coordination Management Cell (PCMC)

A Programme Coordination Management Cell (PCMC) shall be created to provide Secretariat support to CPSC and PSC. Dairy Division (support by PCMC & PMA) will be responsible for analysis and timely placement of project proposals to PSC as well as for providing inputs to CPSC for successful implementation of the scheme as per the project objectives and deliverables.

8.4 State Level Technical Management Committee (SLTMC)

At the State level, there will be a State Level Technical Management Committee (SLTMC), which will be headed by Additional Chief Secretary/Principal Secretary/Secretary/Commissioner of the State, comprising representative of DAHD, SRLM, State Dairy Federation and NDDB as members for effective implementation and to have synergy among the similar dairy development programmes implemented in the State. SLTMC shall oversee state-level monitoring of the projects, the land availability for village level institutions like, primary dairy societies and primary level cold chain infrastructure statutory requirements, co-ordination among SIAs/EIAs, policy support etc. SLTMC must ensure that there is no duplication of activities and project area in the States. The composition of SLTMC will be as follows:

- i. Additional Chief Secretary/ Principal Secretary/Secretary/Commissioner of DADF of the State Government – Chairman of the Committee
- ii. Representatives from Dairy Development/ Animal Husbandry Department of the State Government.

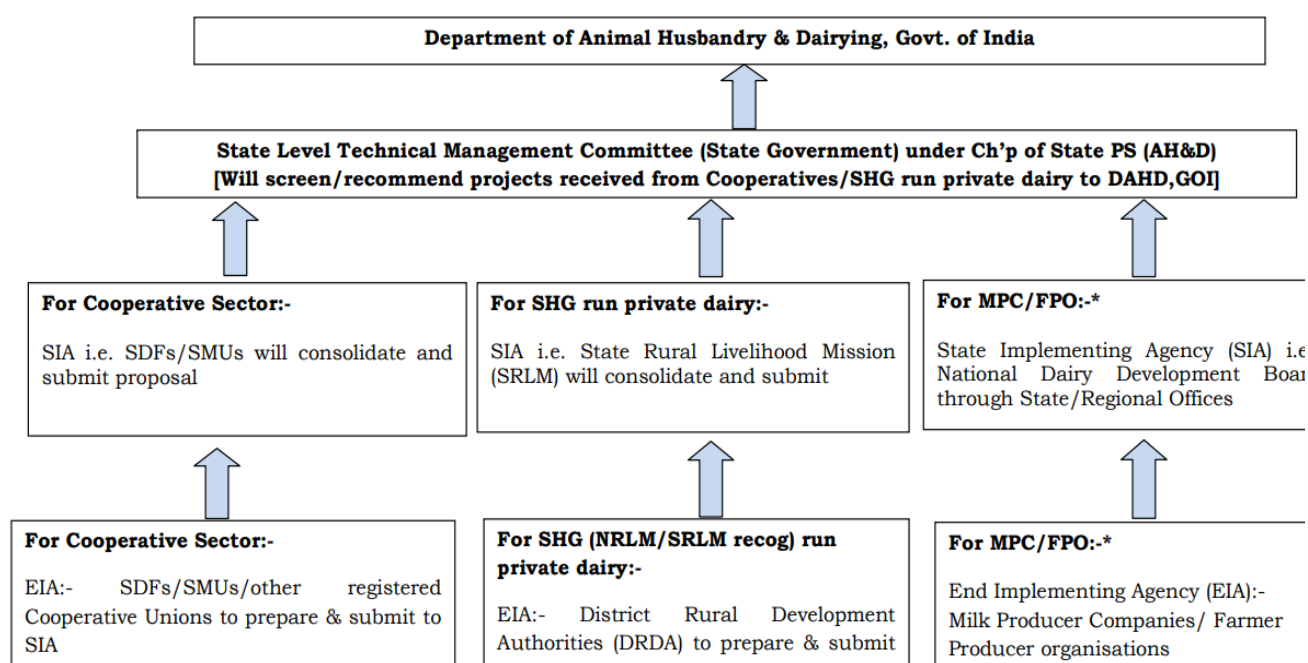
- iii. Representatives from Department of Animal Husbandry and Dairying, Government of India.
- iv. Representative from Department of Finance and Planning of the State Government
- v. District Magistrate of Scheme Districts or his representative.
- vi. CEO, State Livestock Board
- vii. Representative of SRLM
- viii. Managing Director, State Dairy Federation/Milk Producer Company – Member convener (for projects under Component A)
- ix. Representative of NDDDB (nominated by Chairman, NDDDB), Member convener (for projects under Component B)

9. Project preparation and submission of proposal

- a. A Situation Analysis shall be undertaken and shall include: a) Pre project Base line Survey by an independent Agency; b) funding under earlier programmes, c) role and capabilities of different players and d) area of operation etc.
- b. The Project/subproject Proposals under NPDD shall ensure optimal resource utilization and shall discourage avoidable expenditure and duplication/ overlap of activities.
- c. Special efforts must be made to re-commission idle equipment and equipment that is damaged but repairable. Proposal for fresh procurement shall be made only after making a realistic need assessment.
- d. The proposal may be prepared by furnishing requisite information as per prescribed factsheet and Annexure of the guideline. Guideline/ procedure for preparing a new project proposal along with prescribed annexure I to VI is **enclosed**.
- e. The project proposals are to be planned to envisage dairy development in two to three adjoining districts comprehensively to make it technically feasible. At the time of formulating a proposal, the SIAs/EIAs shall see that projected dairy development activities are aligned with the activities of ongoing and approved dairy infrastructure projects in the project districts to ensure best utilisation of project resources in the developmental activities. The existing dairy infrastructure in two to three adjoining districts lying unutilised in the State should be brought under the ambit of baseline analysis during project planning for envisaging overall requirement of the State. State Level Technical Management Committee under the Chairmanship of State Principal Secretary/Administrative Secretary shall ensure that there is no duplication of project activities and project area in a project/a set of projects.
- f. The project proposal of SIA duly recommended by State Government/SLTMC should be submitted to DAHD for consideration.
- g. Soft copy of the Detailed Project Report should be submitted to DAHD timely, for appraisal and approval by the Project Sanctioning Committee.
- h. An indicative check list for preparing DPR under the scheme is as follows:-
 - i. DPR should include profile of the implementing agencies including end implementing agencies provided including financial condition, justification on component wise fund requirement provided.
 - ii. Annexure-I to VI filled up (district-wise and consolidated) as given in Departments website

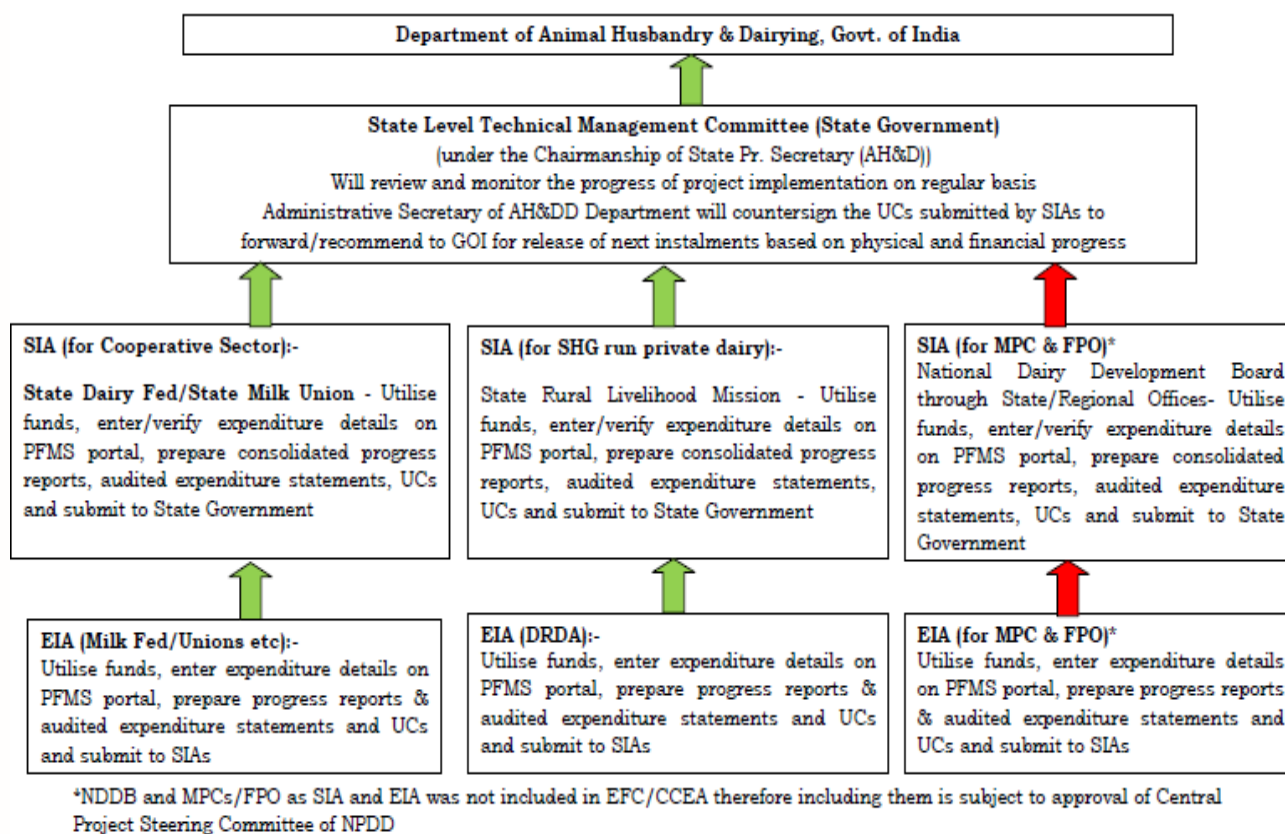
- iii. An undertaking indicating no duplication of funding and project activities with project under schemes of Central / State Government
- iv. The cost of the equipments (including make, capacity, year etc.) and civil works (area and cost per unit) proposed needs to be adequately supported by the quotation/tender documents/copies of orders etc.
- v. Status of implementation of earlier project in the district's proposed in the DPR and its physical and financial achievements against target along with closure reports and UCs.
- vi. Balance sheet and Profit & Loss a/c for the year last financial year clearly indicating net and accumulated profit and loss.
- vii. Implementing agency has mapped all the EIAs in the PFMS for implementation of the scheme
- viii. Copy of FSSAI, ISO, HACCP etc certification of dairy plant

Project Preparation and Submission - Component A (Flow Chart)



*NDDDB and MPCs/FPO as SIA and EIA was not included in EFC/CCEA therefore including them is subject to approval of Central Project Steering Committee of NPDD

UC Submission - Component A (Flow Chart)



10. Submission of information

SIA shall submit following information on Quarterly basis to DAHD (at the end of March, June, September & December):

- State-wise, Project-wise and component-wise progress report indicating total outlay, Grant assistance, SIA/EIA contribution, fund released to EIAs, fund utilized by EIAs, unspent balance etc.
- Physical progress vis-à-vis approved physical parameters. Status of installation of BMC/Laboratory equipments etc.
- Audited utilization certificate (duly authenticated by registered auditor and also countersigned by Administrative Secretary/Chairman of the State Level Technical Management Committee of concerned State Animal Husbandry and Dairying Department.
- Audited report of expenditure vis-à-vis approved components/sub-components/items etc.
- SC/ST/Women population covered under the project.

11. Ranking of States (Credit Ranking)

The project execution and implementation performance of States will be reviewed through State Level Technical Management Committee (SLTMC) meetings. Accordingly, States will be ranked based on their performance. The ranking may be deemed as credit ranking which will help States to apprise and seek subsequent financial assistance under projects on priority under the scheme.

12. Project Monitoring Agency (PMA)

For the purpose of overall monitoring of the approved projects/sub-projects under dairy development schemes through online project monitoring portal, PMA shall be put in place who shall be responsible to develop a Management Information System (MIS).

Functions of PMA:

- i. Monitoring of dairy projects as per approved project schedule
- ii. Maintenance of MIS to provide all inputs for policy intervention and strategy finalisation by DAHD.
- iii. Prepare financial/physical progress reports of various schemes on periodical basis as well as when required.

13. Project completion report

On completion of project, the State Government would review the achievements made under the project vis-s-vis targets and would submit a project completion report indicating its achievements, setbacks etc alongwith a consolidated utilisation certificate (audited) and consolidated audited statement of expenditure, audited balance sheet of SIA/EIA/PIA etc.

FACT SHEET- NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT

STATE :

1.0 PROJECT SYNOPSIS

1.1 Total Estimated Cost(Rs in Lakhs)

1.2 Duration of Project

1.3 District Covered

1.4 Name of the State Implementing Agency

2.0 ITEMS							
			BASE YEAR		EOP TARGETS		
	Monitoring Parameters						
2.1	DCS Organised						
2.2	DCS Functional						
2.3	Farmers Members (000)						
2.4	Chilling Capacity (TLPD)						
2.4.1	Chilling Plant Capacity						
2.4.2	Bulk Milk Coolers						
2.5	Dairy Plant Capacity (TLPD)						
2.6	Daily Average Milk Procurement(TKgPD)						
2.7	Daily Average Milk Marketing(TKgPD)						
3.0	OUTLAY DETAILS	Amount In Lakhs					
	ITEMS		CAPITAL		RECURRING		TOTAL
3.1	Milk chilling facilities						
3.2	Milk Testing Laboratories						
3.3	Certification and Accreditation						
3.4	Information and Communication Technology Networking						
3.5	Training						
3.6	Awareness						
3.7	Planning and Monitoring						
3.8	Research and Development						
	Grand Total						
4.0	Financial Requirement	Amount In Lakh					
		Year wise phasing of Expenditure					

		1st year	2nd year	3rd year			Total
5.0	LOCATION OF EXISTING / PROPOSED BULK MILK COOLERS WITH CAPACITY						
6.0	LOCATION OF EXISTING / PROPOSED AMCU/DPMCU/EMAT						
7.0	LOCATION OF EXISTING / PROPOSED DAIRY PLANT LABS						
8.0	Unspent Balance as on 1st April of the current year:						
9.0	Utilisation Certificate as on 31st March of the current year:						
	TLPD:---> THOUSAND LITRES PER DAY						
	TKgPD:----> THOUSAND kg. PER DAY						

NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT

ESTIMATES OF MILK PRODUCTION IN THE DISTRICT IDENTIFIED FOR DAIRY DEVELOPMENT PROJECT					
(YEAR -----)					
NAME OF DISTRICTS.....					
S.NO.	PARTICULARS				
1.0	NO. OF MILCH ANIMALS				
1.1	Cows				
1.2	Buffaloes				
2.0	MILK YIELD(HERD AVERAGE)				
2.1	Cows(Liters/day)				
2.2	Buffaloes(Liters/day)				
3.0	AVERAGE LACTATION LENGTH(DAYS)				
3.1	Cows				
3.2	Buffaloes				
4.0	AVERAGE DRY PERIOD(DAYS)				
4.1	Cows				
4.2	Buffaloes				
5.0	DAILY MILK PRODUCTION(MT)				
5.1	Cows				
5.2	Buffaloes				
5.3	Total				
6.0	ANNUAL MILK PRODUCTION(MT)				
6.1	COWS				
6.2	BUFFALOES				
6.3	TOTAL				

NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT

Key Physical Targets and Monitoring Parameters of the Project

S.NO.	PARTICULARS	BASE	YEARS OF OPERATION		
		YEAR	1st	2nd	3rd
					(EOP)
1.0	KEY PHYSICAL TARGETS				
1.1	NUMBER OF FUNCTIONAL DCS *				
1.2	PRODUCERS MEMBERS(000) *				
1.3	CHILLING CAPACITY(TLPD) #				
1.3.1	CHILLING PLANT CAPACITY (TLPD)				
1.3.2	BULK MILK COOLERS (TLPD)				
1.4	DAIRY PLANT CAPACITY(TLPD) #				
1.5	AVERAGE DAILY MILK PROCUREMENT(TKgPD)				
1.6	AVERAGE DAILY MILK MARKETING(TLPD) **				
1.7	NUMBER OF VILLAGE LEVEL LAB STRENGTHENED				
1.7.1	AUTOMATIC MILK COLLECTION UNITS				
1.7.2	DATA PROCESSING AND MILK COLLECTION UNIT				
1.7.3	ELECTRONIC ADULTERATION TESTING MACHINE				
1.8	NUMBER OF STATE/DISTRICT LEVEL LAB STRENGTHENED				
1.9	AVERAGE NO. OF SAMPLES TESTED FOR MILK ADULTERATION				
1.10	AVERAGE METHYLENE BLUE REDUCTION TIME				
1.11	NO. OF VILLAGE COVERED				
2.0	MONITORING PARAMETER				
2.1	MEMBERS PER FUNCTIONAL DCS				
2.2	AVERAGE PROCUREMENT PER MEMBER(LPD)				
2.3	AVERAGE PROCUREMENT PER DCS(LPD)				

* ---> IN AND.....DISTRICTS OFSTATE

** ---> IN.....AND.....TOWNS.

---> PLEASE INDICATE THE LOCATION OF THE PLANT ALSO VIS-À-VIS THEIR CAPACITIES.

PLEASE ENCLOSE A MAP SHOWING THE LOCATION & CAPACITIES OF PLANTS ON MILK ROUTES.

*Detailed Specifications and component wise cost breakup needs to be provided separately in DPR

Annexure-IV (Contd/..)

List of Dairy Cooperative Societies proposed to be covered (Separate Sheet for each district)

S. No.	Name of District	Name of Taluka/Block	Name of DCS/SHG proposed for EMAT/AMCU/DPM CU installation	Is DCS/SHG is registered/ Unregistered	EMAT/AMCU/D PMCU proposed to be installed	Average Daily Milk Procurement (LPD) (2020-21)	No. of Milk Producer enrolled with DCS/SHG	Present milk testing facility available at the proposed DCS

Annexure-V

Proposal for BMC Installation under NPDD

State: _____
 Name of State Implementing Agency: _____

Districts proposed to be covered: _____

Physical & Financial targets of the project:-

Annexure-V

Proposal for BMC Installation under NPDD

State: _____

Name of State Implementing Agency: _____

Districts proposed to be covered: _____

Physical & Financial targets of the project:-

Sl. No.	Name of EIA/Milk Union	Name of District	Name of the Taluka/ Block	Total number of DCS	No. of DCS/SHG in which BMC is installed#					No. of DCS/SHG where BMC not installed (Gap)	No. of DCS/SHG Proposed for BMC installation														
					Capacity (KL)						Capacity (KL)														
					No.	0.5	1	2	5		No.	0.5	1	2	5										
1		1.1	1.1.1																						
			1.1.2																						
		1.2	1.2.1																						
			1.2.2																						
		Sub-total																							
2		2.1	2.1.1																						
			2.1.2																						
		2.2	2.2.1																						
			2.2.2																						
		Sub-total																							
		Grand Total																							

Separate Sheet providing list of DCS/SHG where BMC is installed with capacity and Present level of milk procurement.
 *Detailed Specifications and component wise cost breakup needs to be provided separately in DPR

Annexure-V (Contd/..)

Separate Sheet providing list of DCS/SHGwere BMC is installed with capacity and Present level of milk procurement.
*Detailed Specifications and component wise cost breakup needs to be provided separately in DPR

List of Dairy Cooperative Societies proposed to be covered (Separate Sheet for each district)

Annexure-V (Contd/ ..)

**List of Dairy Cooperative Societies proposed to be covered
(Separate Sheet for each district)**

S. No.	Name of District	Name of Taluka/Block	Name of DCS/SHG proposed for BMC installation	Is DCS/SHG proposed for BMC is registered/ Unregistered	Name of Cluster DCS/SHG associated with proposed BMC DCS	Average Daily Milk Procurement (LPD) (2020-21) at Cluster DCS/SHG and BMC DCS	No. of Milk Producer enrolled with Cluster DCS/SHG& BMC DCS	Present milk testing facility available at the Cluster DCS/SHG and BMC DCS/SHG

Annexure VI							
NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT							
Estimated Cost of the				Dairy Project			
Name of the District:-							(Rs. in Lakh)
				Years of Implemen- tation			Total Cost
COMPONENT-WISE ALLOCATIONS		Physical Target	Unit price/ cost	1st	2nd	3rd	
		EOP					
1.0	Milk Chilling facilities (at village/ block/district level)						
	Capital Expenditure						
1.1	Civil works, Equipment for bulk milk coolers						
1.2	Equipment for bulk milk coolers						
	Sub-total (Capital)						
2	Construction/Establishment of Milk and Milk Product Testing Laborato- ries						
2.1	Capital Expenditure						
2.1.1	DCS/village level laboratories/ at Bulk Milk Cooler (BMC) centers						
2.1.1.1	Data Processing and Milk Collection Units						
2.1.1.2	Automatic Milk Collection Unit						
2.1.1.3	Electronic Milk Adulteration Testing Machine						
2.1.1.4	Purchase of laboratory furniture						
2.1.1.5	Any other equipment (Details to be provided separately)						
2.1.2	Dairy Plant Level/State Level						
2.1.2.1	Purchase of laboratory equipments (for chemical/ microbial (only for union/state level) analysis of milk and milk products) (Details to be pro- vided separately)						

2.1.2.2	System for quality assurance (HAC-CP/ISO) including equipment/computer hardware and software etc						
	Sub-total (Capital)						
3	Certification and Accreditation						
3.1	Recurring Expenditure						
3.1.1	Accreditation and certification of dairy establishments under HACCP/ISO						
	Sub-total (Recurring)						
4	Information and Communication Technology Networking						
4.1	Capital Expenditure						
4.1.1	Purchase of Computers/handheld terminals with accessories						
4.1.2	Purchase of Server System						
4.1.3	Purchase/installation of Software systems (block chain, SAP, ERP for developing traceability, quality network etc)						
	Sub-total (Capital)						
5	Training						
5.1	Recurring Expenditure						
5.1.1	Training of farmers in good hygienic practices/ good manufacturing practices						
5.1.2	Training of Dairy Personnel/milk tester (including Plant and Marketing staff)						
5.1.3	Training on Quality management systems.						
5.1.4	Training of DCS staff/ BMC/ chilling centre/ AMCU/ DPMCU on operations and quality management						
	Sub-total (Recurring)						
6	Awareness Generation						
6.1	Recurring Expenditure						

7	Planning and Monitoring						
	Recurring Expenditure						
7.1	Pre-project Baseline survey (by independent agency) and preparation of project report						
7.2	Concurrent evaluation and in-depth independent evaluation of the project and Post-project impact assessment survey (including success stories, outcomes etc.)						
7.3	Field level inspections, review meetings etc.						
	Sub-total (Recurring)						
8	Research and Development						
	Total Capital Expenditure						
	Total Recurring Expenditure						
	Grand Total						

COMPONENT B

A. Background:

- i. In consonance with the mandate of the Government for the doubling the farmers income, this Department had initiated Japan International Cooperation Agency (JICA) ODA Loan assistance proposal for "Dairying through Cooperatives" (Also Known as "Project for Dairy Development in JICA's Document")
- ii. The scheme is envisaged with a total Outlay of Rs. 1568.28 crore in the form of Loan of Rs.924.56 crore (JPY 14,978 million) by JICA and remaining amount of Rs.475.54 crore as Grant by Govt. of India and Participating Institutes' share of Rs. 168.18 crore.
- iii. A tripartite agreement namely Minutes of Discussion (MOD) has been signed on pilot project by DAHD,GOI, JICA and NDDDB on 24.09.2018.
- iv. Exchange of Note and Loan Agreement for project for Dairy Development have been signed on 21.12.2018 between Department of Economic Affairs (DEA), Government of India and Government of Japan and JICA respectively.

B. Objectives:

To increase sales of milk and dairy products by increasing farmers' access to organised market, upgrading dairy processing facilities and marketing infrastructure and enhancing the capacity of producer owned institutions, thereby contributing to increase in return to milk producers in the project area.

C. Project Components:

- i. Strengthening Milk Procurement Infrastructure
- ii. Milk processing facilities and manufacturing facilities (milk & milk products and cattle feed)
- iii. Support for Marketing infrastructure
- iv. Support for ICT Infrastructure
- v. Productivity Enhancement
- vi. Project Monitoring and Studies
- vii. Training and capacity development

D. Project Area:

The states namely, Bihar and Uttar Pradesh shall be covered on priority. However, any addition of state shall be in compliance to the loan agreement between Government of India and Government of Japan.

As per loan agreement the location for projects is as below:

"Two States selected from following States. Number of States is expandable up to five States. Bihar, Uttar Pradesh, Madhya Pradesh, West Bengal, Andhra Pradesh, Rajasthan, Telangana, Uttarakhand, Punjab"

The scheme will cover all the districts in the State of Uttar Pradesh and Bihar. The priority will be given to socially and economically backward districts having dairying potential (includes all 21 aspirational districts).

E. Eligible Participating Institutions (PIs)/ Producer owned Institutions (POIs)

Milk Unions/ Multi-state Milk Cooperatives/ State Dairy Federations/ Milk Producer Companies

F. Eligibility criteria

(I) Eligibility criteria for PIs Institutional/ Governance Criteria

1. PIs should have a duly constituted Governing Body such as Board of Directors/Management Committee as applicable to the legal form of the PI.
2. PIs should have a full time Chief Executive/Managing Director (or equivalent) and adequate number of qualified technical and managerial personnel at key positions.
3. PIs should be willing to amend Bye-laws.
4. PIs should have fixed/ Undisturbed tenure for senior/ key management personnel including Managing Director/Chief Executive.
5. Board of the PI should nominate one expert each in the field of finance, Dairy Technology and marketing as independent directors.

(II) Financial Criteria

(i) General Financial Criteria (applicable for all PIs)

1. Audit of accounts should be up-to-date and the auditor's observations should not contain any adverse opinion or disclaimer.
2. PIs should not have any over-dues to any financial institution.
3. PI should not be in a default to any bank/financial institution.
4. PI needs to contribute its share in the Project. However, in case PI does not have adequate resources to contribute its share, State Government may offer necessary grant.

(ii) Additional Financial Criteria (applicable for PIs availing loan under the project)

1. PI should have positive net worth.
2. All outstanding dues to producer members should not exceed four payment periods.
3. The financial returns of the project: Project will have uniform rate of Return on Investment (ROI) of 10%(minimum) and Debt Service Coverage Ratio (DSCR) of 1.5 times (minimum) for all sub projects.
4. The loan should be secured through collateral security, which should be minimum 1.5 times of the loan amount in terms of mortgage of immovable assets and hypothecation of movable assets. In case of shortfall, State Government guarantee will be required.

(iii) Technical Criteria : Component wise

A. Strengthening of Milk Procurement Infrastructure:

1. PI should have its own milk processing facilities or have a forward linkage with an existing milk processing facility.
2. PI should have the land/ premises for setting up DCS building and housing Bulk Milk Coolers free from any encumbrances.
3. Preference will be given to PIs that already have in place IT based reporting and monitoring systems.
4. PI should be capable in organising producers' institutions, maintaining transparency in the processes of milk collection at village level, milk quality testing, timely payments to milk producers and grievance redressal system in place.

B. Strengthening of Processing Infrastructure

1. PI should have required environmental/ statutory clearances for setting up of plants.
2. PI should have its own land/ long term lease, free from encumbrances, in case of setting up of new plant or expansion of existing plant. In case of lease, requisite No Objection Certificate from the concerned authority for mortgage to NDDB would have to be obtained.

A.

C. Strengthening of Marketing Infrastructure

1. PI should have own milk processing facility and marketing network for sale of liquid milk & milk products.

D. Support for ICT Infrastructure

1. PI should have its own milk processing facilities or have a forward linkage with an existing milk processing facility.
2. PI should have competent manpower to manage ICT Infrastructure and applications.

E. Productivity Enhancement

E1- Sub Component:- Nutritional Interventions for PE

1. PIs which will identify/recruit technical manpower exclusively for the project will be considered.
2. PIs must have their own plants for manufacturing and supply of cattle feed (pregnancy feed, calf starter & calf growth meal), mineral mixture and fertility supplement or have an assured tie up for sourcing these products.
3. Preference will be given to the PIs which have implemented animal nutrition activities (Ration Balancing Programme (RBP)/Fodder Development) under NDP I successfully.
4. PIs which will create corpus from the beginning for sustainability of the activity, will be given preference.

E2- Sub Component -: Fodder Development

E2.1 - Fodder seed production and distribution/fodder conservation and green fodder enhancement and fodder technology demonstration

1. PIs should have a network of village level farmers organisations such as Village Dairy Cooperative Societies, Milk Producers' Institutions and Self Help Groups (SHGs) and have an experience in conducting demonstrations for technology transfer at field level.
2. PIs should have capacity to formulate and implement a sound plan for demonstrations.
3. Preference will be given to PIs that have prior experience in this area.

E2.2 - Crop residue management

1. PIs must have the capacity to formulate and implement a sound plan for crop residue enrichment and densification.
2. Preference will be given to PIs that have prior experience in this area.
3. PIs should have land (free of encumbrances) for setting up the units.
4. Availability of surplus crop residues in the operational area of PI in large quantity from cereal /cash /fodder crops.
5. PIs should have network of village level farmers organisations such as Village Dairy Cooperative Societies, Milk Producers' Institutions and SHGs for implementation work.

G. DURATION OF THE PROJECT:

The scheme will be implemented during 2021-22 to 2025-26 and will continue till 2027-28.

H. Funding Pattern and fund flow:

The fund under the scheme is classified into loan component and grant component. While the loan component has been signed with Government of Japan by Government of India (D/O Economic Affairs) on 21st December 2018, the grant component shall be funded under on-going programme 'National Dairy Development Programme' (NPDD).

(a) Funding Pattern:

- i. Strengthening of processing infrastructure component and feed manufacturing Facilities will be funded as interest bearing loan (90% of the project cost as Loan and rest 10% as State Government/ POI's contribution).
- ii. Building for village level Producers' institution and capital cost on BMC and AMCU/DPMCU shall be funded as 50% ODA loan and 50% Grant-in-aid,
- iii. The activities such as Productivity Enhancement, milk collection accessories, all milk testing equipment at village level, Dairy Cooperative Society (DCS) establishment will be funded as 90% grant-in-aid and 10% as State Government/POI's contribution.
- iv. ICT and Marketing infrastructure shall be funded as 80% ODA Loan and 20% Grant-in-aid by Government of India

- v. Project Management & Learning shall be 100% Grant basis. 90% of the fund to be transferred to NDDDB for conducting trainings, overseas exposure, concurrent evaluation, impact studies, appointment of auditors for audit of accounts etc. The rest 10% of the fund shall be retained at DAHD for creating and managing PCMC-cell at DAHD in the form of suitable budget provision under the appropriate head of scheme.

(b) Fund Flow mechanism of Component-B (JICA) of NPDD:

The Government of India will bear the hedging cost arising out of currency difference in Yen and Rupee. As per Government Finance Rules and JICA procedure, the ODA loan is to be transferred by JICA in two/ three tranches to the consolidated fund of India with RBI. The Budget Division, D/O Economic Affairs (DEA) will keep suitable budget provision based on the approved programme and as proposed by DAHD year on year basis. Subsequently, D/O Expenditure will allocate budget to DAHD under the scheme. DAHD in turn will release the fund to NDDDB based on the action plan approved by CPSC and progress made under the programme. Preferably, such releases shall be made in two instalments in a financial year.

GoI will receive the ODA loan from JICA at about 0.85% p.a. and transfer fund to National Dairy Development Board (NDDDB) for onward disbursement to the Producer owned Institutions (POIs) @ 1.5 % p.a. NDDDB shall retain a margin of 0.5-0.65% p.a. as cost of fund management and loan default risk. The period of reimbursement to JICA is 20 years by GOI (Repayment period of JICA ODA loan is 15 years with 5 years grace period). The period of reimbursement by Producer owned organisation (Cooperatives and Producer Companies) to NDDDB shall be maximum 10 years, of which first 2 years (maximum) shall be moratorium on payment of principal amount.

A.

I. JICA Procurement Guideline with Japanese ODA Loans

Procurement of goods and services covered by Japanese ODA Loans should be implemented in accordance with "Guidelines for Procurement under Japanese ODA Loans", dated April 2012. Employment of consultants should be implemented in accordance with "Guidelines for Employment of Consultants under Japanese ODA Loans", dated April 2012. "Principles of Procurement under the Project"

J. Institutional Arrangement:

NPDD	Component B
	Cooperative Sector
Recommending authority (for submission of proposals)	Implementation and Monitoring Cell (IMC) of National Dairy Development Board (NDDDB)
State Implementing Agencies/ Implementing Agencies	NDDDB - Nodal agency for project implementation and monitoring
End Implementing Agencies/PIs/POs	All State Dairy Federations and their constituent District/Taluka Level Milk Unions and farmer producer organisations, Government dairy/other registered Cooperative Unions (like dairy cooperatives registered under Multi State Coop. Act and Mutually Aided Cooperative Society Act etc.).

Village level Participating Agencies	All dairy cooperative societies and other agencies associated or affiliated to above SIAs or EIAs like village level NGOs, SHGs, Universities, Colleges, ICAR Institutes etc.
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(a) Implementation Mechanism

The project will be implemented through National Dairy Development Board (NDDB) who in turn will implement it through the Producer oriented Institutions (POIs) such as State Dairy Federation, Multi State Milk Cooperatives, District/Taluka Milk Unions and Milk Producer Companies.

(b) Monitoring and policy decisions

(i) Central Project Steering Committee (CPSC)-

At the apex level, there will be a Central Project Steering Committee (CPSC), headed by Secretary (AHD), GoI, which will provide policy and strategic support to the project, monitor the progress of approved projects of NPDD component B, consider annual action plans, give policy directions and shall have the authority to re-appropriate component-wise fund requirement in approved programmes, change the eligibility conditions and other terms & conditions of the agreements between stakeholders, implementation arrangement and can change the composition of committees viz. CPSC, PSC and IMC.

Secretary, DAHD	Chairperson
Financial Advisor, DAHD	Member
Animal Husbandry Commissioner, DAHD	Member
Deputy Director General (Animal Sciences), ICAR	Member
Principal Secretary/ Secretary, Department of Animal Husbandry and Dairy of States (one each from North, South, East and West)	Member
MDs of State Dairy Federations (one each from North, South, East and West)	Member
Chairman, NDDB or his nominee	Member
Managing Director/ Executive Director, NDDB	Member
Group Head (FPS), NDDB	Member
Director NDRI Karnal	Member
NRLM-Representative	Member
Representative from JICA as an observer	Member
Joint Secretary (CDD), DAHD	Member Secretary

(ii) Project Sanctioning Committee (PSC)

Project Sanctioning Committee (PSC) will be headed by Secretary AHD, GoI and will have the authority to sanction projects, appraised and recommended by (IMC), NDDB for Component B. PSC will have power for re-appropriation of funds within the components, change norms and change unit cost of items of the project. PSC will also have power to re-appropriate funds within the approved sub projects of same POIs/IAs and decide the loan security mechanism for sub- projects (w.r.t component B). The PSC will meet quarterly or as frequently as necessary to ensure that proposals received from POIs/IAs are considered without unreasonable delay. The composition of PSC will be as under:

- i. Secretary, AHD, GoI –Chairman of the Committee
- ii. Financial Advisor, DAHD
- iii. Joint Secretary (Dairy Development), DAHD
- iv. Chairman, NDDB or his nominee not below the rank of Executive Director (ED)
- v. Executive Director / Group Head (FPS), NDDB
- vi. A representative from the concerned State Government and the State Dairy Federation would be an invitee while discussing the proposals pertaining to that particular state.
- vii. Representative from ICAR
- viii. Representative from Rural Development
- ix. Representative from NRLM/concerned SRLM
- x. Deputy Commissioner (DD) / Assistant Commissioner(DD) , GoI – Member Convener

(iii) Programme Coordination Management Cell (PCMC)

A Programme Coordination Management Cell (PCMC) shall be created to provide Secretariat support to CPSC and PSC. PCMC will be responsible for analysis and placement of projects sent by IMC of NDDB to PSC, as well as for providing inputs to CPSC for successful implementation of the project as per the objectives. PCMC shall be headed by Joint Secretary (CDD). Project Management Consultant (PMC) under the Project Consultancy component will assist PCMC and IMC in the implementation of the project activities.

(iv) State Level Technical Management Committee (SLTMC)

At the State level, there will be a State Level Technical Management Committee (SLTMC), which will be headed by Additional Chief Secretary/Principal Secretary/Secretary/Commissioner of the State, comprising representative of DAHD, SRLM, State Dairy Federation and NDDB as members for effective implementation and to have synergy among the similar dairy development programmes implemented in the State. SLTMC shall oversee state-level monitoring of the projects, the land availability for village level institutions like, primary dairy societies, bulk milk cooling centres and cattle feed plants, statutory requirements, co-ordination among PIs and NDDB, policy support etc. All PIs/SIAs shall be the member of the committee. For the SHG-run private dairies/producer companies, project proposals shall be submitted to the concerned SLTMC for recommending the same to Govt. of India. The composition of SLTMC will be as follows:

- i. Additional Chief Secretary/ Principal Secretary/Secretary/Commissioner of DADF of the State Government – Chairman of the Committee
- ii. Representatives from Dairy Development/ Animal Husbandry Department of the State Government.
- iii. Representatives from Department of Animal Husbandry and Dairying, Government of India.
- iv. Representative from Department of Finance and Planning of the State Government
- v. District Magistrate of Scheme Districts or his representative.
- vi. CEO, State Livestock Board
- vii. Representative of SRLM
- viii. Managing Director, State Dairy Federation/Milk Producer Company – Member convener (for projects

under Component A)

- ix. Representative of NDDDB (nominated by Chairman, NDDDB), Member convener (for projects under Component B)

(v) Implementation & Monitoring Cell (IMC)

An Implementation and Monitoring Cell (IMC) located at NDDDB, Anand, will appraise the project proposals and screen them based on merit and manage the implementation and monitoring of day-to-day project activities. IMC will forward the appraised project to PSC for consideration. IMC will be supported by various Technical Groups within NDDDB during implementation of the scheme and PMC. IMC will be headed by Managing Director/ Executive Director, NDDDB. IMC will conduct due diligence with respect to re-appropriate the funds within the approved sub-components of the approved project and the securitization arrangements of loan component for sub-projects subject to concurrence of PSC. IMC shall identify necessary changes required in the programme for effective implementation and prepare policy proposals for decision of CPSC. It will also prepare annual action plan, comprehensive loan drawl plan (quarterly/half yearly/annually) as per reimbursement procedure as mentioned in schedule 6 and technical appraisal note/ document required for smooth implementation of the programme for consideration of CPSC.

K. PROJECT PREPARATION AND SUBMISSION OF PROPOSAL

- i. NDDDB will conduct workshops for sensitization of the Project. Along with the workshop, training for strategic management, business planning and marketing strategy will be provided to potential Participating Institutions (PI).
- ii. PI/Pols with support from NDDDB will prepare and submit sub-project proposal to IMC and SLTMC. IMC will conduct appraisal with support from NDDDB's technical and functional groups. SLTMC after screening the sub-project will forward recommendation to Gol. In case PIs/Pols need guarantee and/or grant to fill viability gap, SLTMC should send a commitment letter from respective state government along with recommendation to Gol. Once technical and financial assessment of the proposal is complete by IMC, a 'Note for approval' will be prepared and submitted to PSC for approval.
- iii. In case environmental clearance/permissions are required to obtain, NDDDB will scrutinize the compliance and inform PIs. PIs shall obtain those clearances prior to commencement of any project activities.
- iv. In order to have review from JICA, after sanctioning of sub-projects by PSC, IMC shall submit the Financing Request Format, Screening Format of each sub-project as per JICA Guidelines for Environmental and Social Considerations (April 2010) with IMC's Note for Approval.
- v. After obtaining all the required clearance, NDDDB and PIs will sign Project Agreement. PIs will submit Fund Utilization Certificate (FUC) to IMC on monthly basis, and accordingly, NDDDB will disburse the fund to PIs. While the sub-project will comprise different components, NDDDB will manage and disburse fund of loan and grant separately.
- vi. IMC will monitor the progress of sub-projects including conducting field visit. IMC shall report the progress of sub-projects to DAHD, Gol with Copy to JICA.
- vii. The Project/subproject Proposals under Dairying through Cooperatives (DTC) JICA assisted project shall ensure optimal resource utilization and shall discourage avoidable expenditure and duplication/ overlap of activities.

- viii. Special efforts must be made to re-commission idle equipment and equipment that is damaged but repairable. A list indicating condemned equipment's needs to be prepared and submitted as a part of the project. Proposal for fresh procurement shall be made only after making a realistic need assessment.
- ix. The DPR for individual projects shall be prepared based on the model Sub Project Proposal (SPP) annexed. The detailed Guideline/ procedure for preparing of a new project proposal along with model sub-project plan is available on DAHD/NDDDB website.
- x. The proposal shall include copies of FSSAI registration certificate for plant, process certification from BIS, balance sheet and a copy of income tax return of concerned POI of last financial year in the DPR.
- xi. The project proposal of PIs/Pols duly recommended by SLTMC should be submitted to NDDDB with a copy endorsed to DAHD for consideration.
- xii. NDDDB shall submit DPR and appraisal note of all proposals received under the scheme to DAHD.
- xiii. IMC will monitor the progress of sub-projects including conducting field visit. IMC shall report the progress of sub-projects to DAHD.

L. Submission of Information:

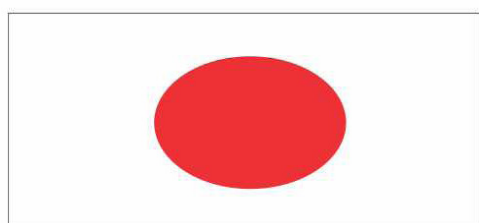
- i. POI shall submit following information on Quarterly basis to NDDDB with copy endorsed to DAHD (at the end of March, June, September & December):
- ii. Project-wise and component-wise progress report indicating total outlay, loan and Grant assistance, PI/Pols contribution, fund released (loan & grant) to PIs/Pols, fund utilized by PI, unspent balance etc
- iii. Physical progress vis-à-vis key parameters vis-a-vis approved physical parameters. Status of tender/ installation of dairy plant/BMC/ Cold storages/ Laboratory equipment's etc.
- iv. Audited utilization certificate (duly authenticated by registered auditor and also countersigned by Administrative Secretary of concerned Department of State Government) to NDDDB. NDDDB shall propose release of fund based on the utilization and also for new proposal. In case of a new proposal, the progress of ongoing proposals in the state needs also be submitted.
- v. Audited report of expenditure vis-à-vis approved components/sub-components/items etc.
- vi. SC/ST/Women population covered under the project.

M. Project completion report:

On completion a project, the SLTMC would review the achievements made under the project vis-a-vis targets and would submit a project completion report indicating its achievements, setbacks, operational status of Dairy plant/ BMC etc. alongwith a consolidated utilisation certificate (audited) and consolidated audited statement of expenditure, audited balance sheet of Pols/PIs etc.

NDDDB will be put up the following logo on at all facilities introduced under JICA's funding:

DAIRY DEVELOPEMENT PROJECT
FUNDED BY JAPANESE ODA LOAN
AS A TOKEN OF FRIENDSHIP AND COOPERTAION
BETWEEN
JAPAN AND INDIA
[Completion year:20XX]

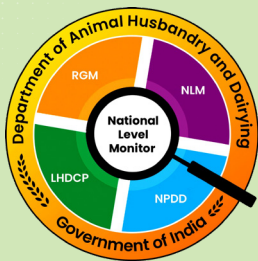


From
the people of japan

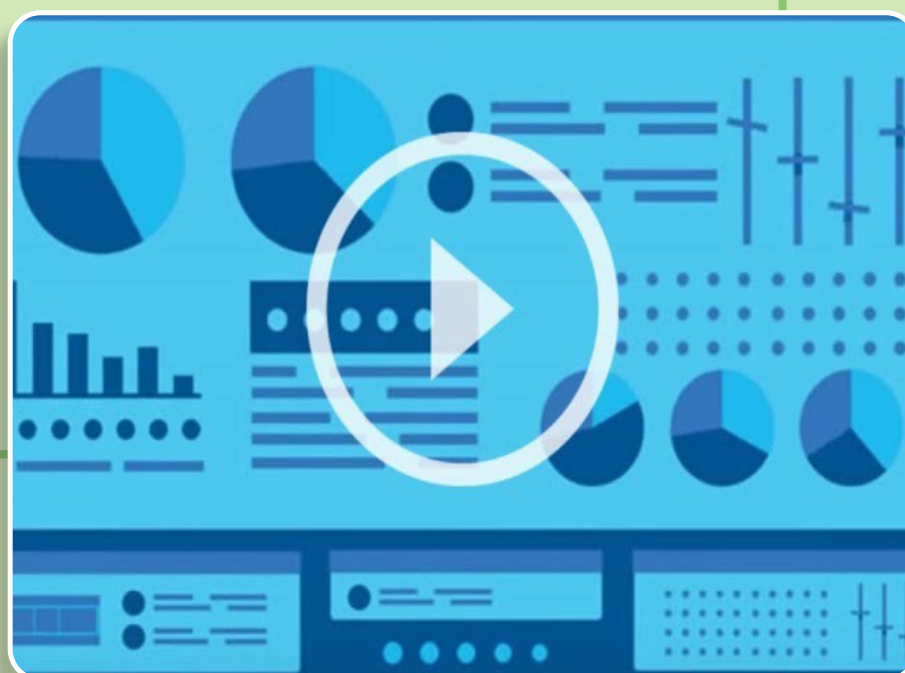
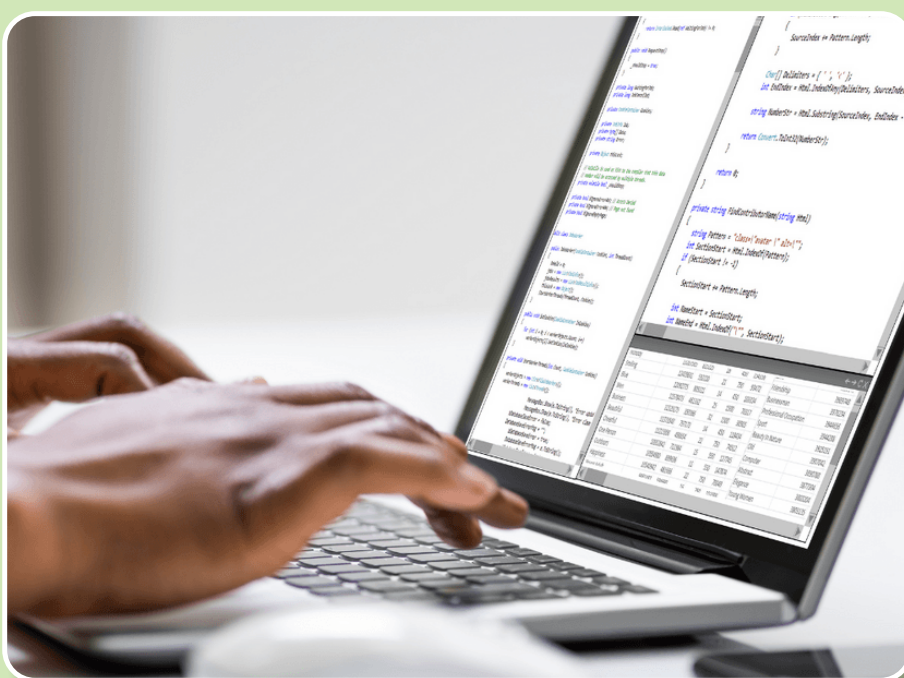


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Government Of India





Web Application for National Level Monitoring-Information Capturing



6

Web Application for National Level Monitoring-Information Capturing

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Web Application for National Level Monitoring-Information Capturing

About Web Application

Web application has been developed to meets the requirements of the Department of Animal Husbandry and Dairying and for National Level Monitors. It is a responsive Web application that runs on any device like Mobile/Desktop Computers.

This application will cover following four major Scheme: -

- i. National Livestock Mission (**NLM**)
- ii. Rashtriya Gokul Mission (**RGM**)
- iii. National Programme for Dairy Development (**NPDD**)
- iv. Livestock health and Disease control programme (**LH&DCP**).

Roles

This application is Role based application. Various type of roles have been defined in the system.

Admin Role: Management of Master data , Activation/ Deactivation of user ID etc. View all reports regarding Schemes.

Higher Officers : Higher Officers can view the concerned reports and Dashboard

PMU Role: user may provide support / activity of the National Level Monitors.

Scheme's Nodal officer: user can enter data in their related part of scheme's forms.

Scheme's State Nodal officer: user can enter data in their related part of scheme's forms.

Implementing Agency: Implementing Agency can enter data in their related part of scheme's forms.

National Level Monitors: National Level monitors can enter data / observation in their related scheme's forms and submit.

Tracking of Activity/Logs

This application has security feature like capturing the IP address , date & time of the activity w.r.t the user Id and maintain the logs.

It can be accessed through URL <https://monitor.dahd.gov.in>

भारत सरकार | Government of India

मत्स्यपालन, पशुपालन और डेयरी मंत्रालय
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY & DAIRYING
DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING

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आजादी का
अमृत महोत्सव

Home About Us Schemes User Manual Contact Us LOGIN

System for capturing observations by National Level Monitors (NLM) during field visits

About Us

Livestock are integral to agriculture in India, enhancing food security, providing employment, and contributing significantly to the Indian Economy. They also act as a financial safety net for rural households and play a crucial role in exports.

In order to meet the rising demand of animal products like - milk, meat, egg, wool, this sector needs further strengthening and value addition in terms of new technologies, breeding program, disease control & eradication programs, establishing dairy & meat processing infrastructures, human resource development etc. To address these challenges, the Department of Animal Husbandry and Dairying, Govt. of India has launched several schemes out-reaching to States/UT's in the Country. Presently four major Scheme are implemented by the Department of the Animal Husbandry and Dairying namely:

- National Livestock Mission (NLM)
- Rashtriya Gokul Mission (RGM)
- National Programme for Dairy Development (NPDD)
- Livestock health and Disease control programme (LH&DCP).

Know More

Scheme

- Rashtriya Gokul Mission
- National Livestock Mission
- Livestock Health and Disease Control
- National Programme for Dairy Development

15
15th Anniversary of the Ministry of Fisheries, Animal Husbandry and Dairying

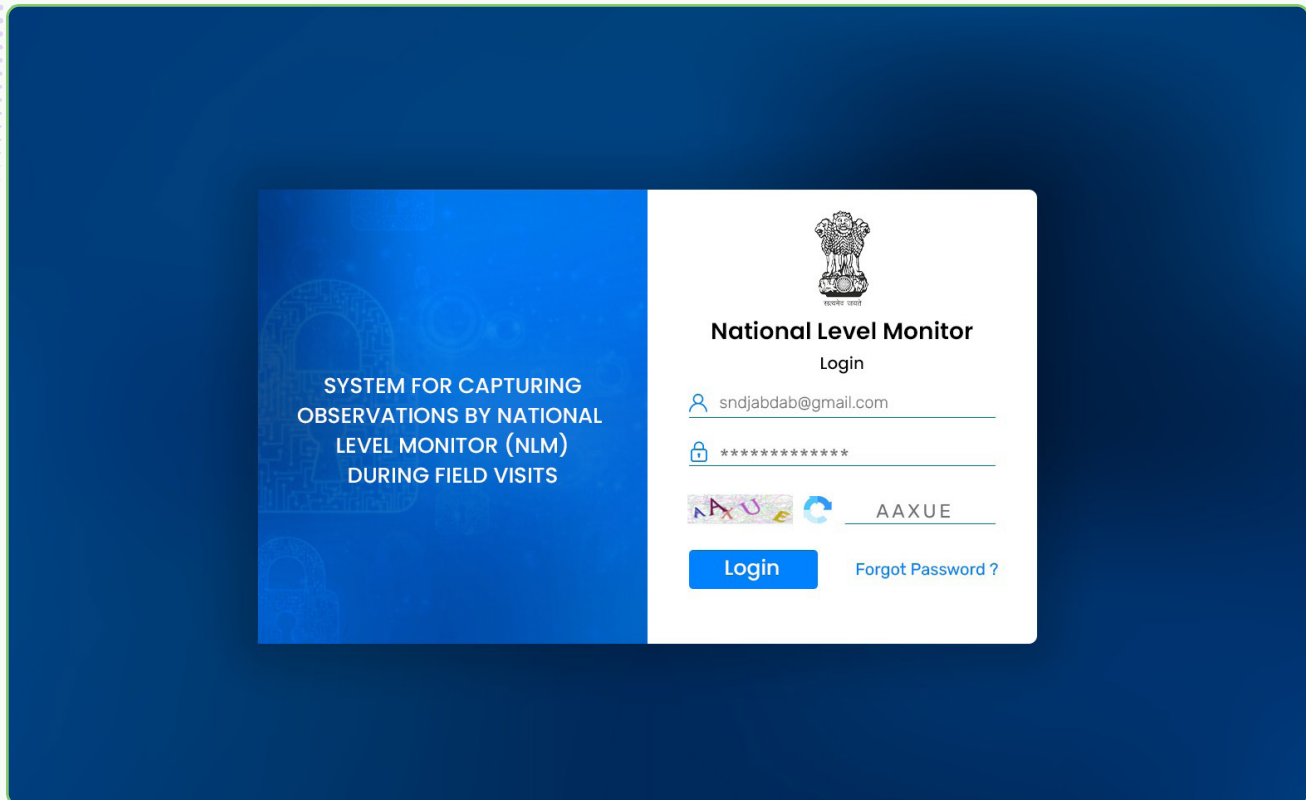
india.gov.in

Press Information Bureau

PM INDIA

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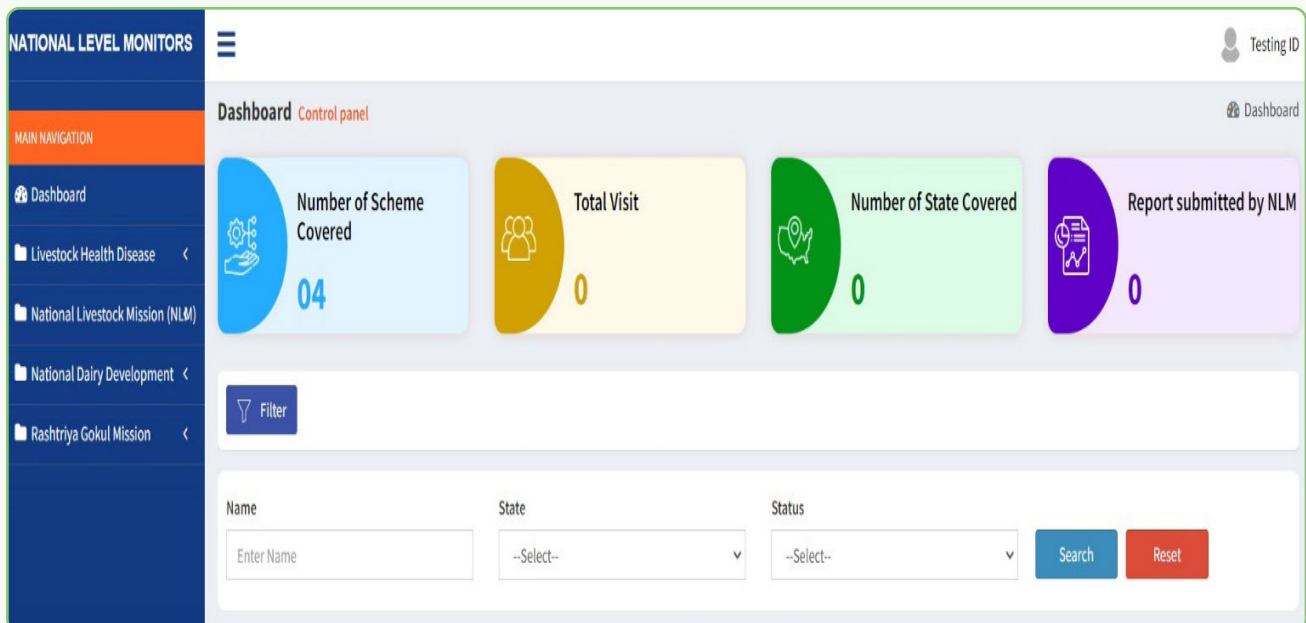
- This home page has been options like [Login](#) , [Dashboard](#) etc.
- On click **“Login” option** following page will appear

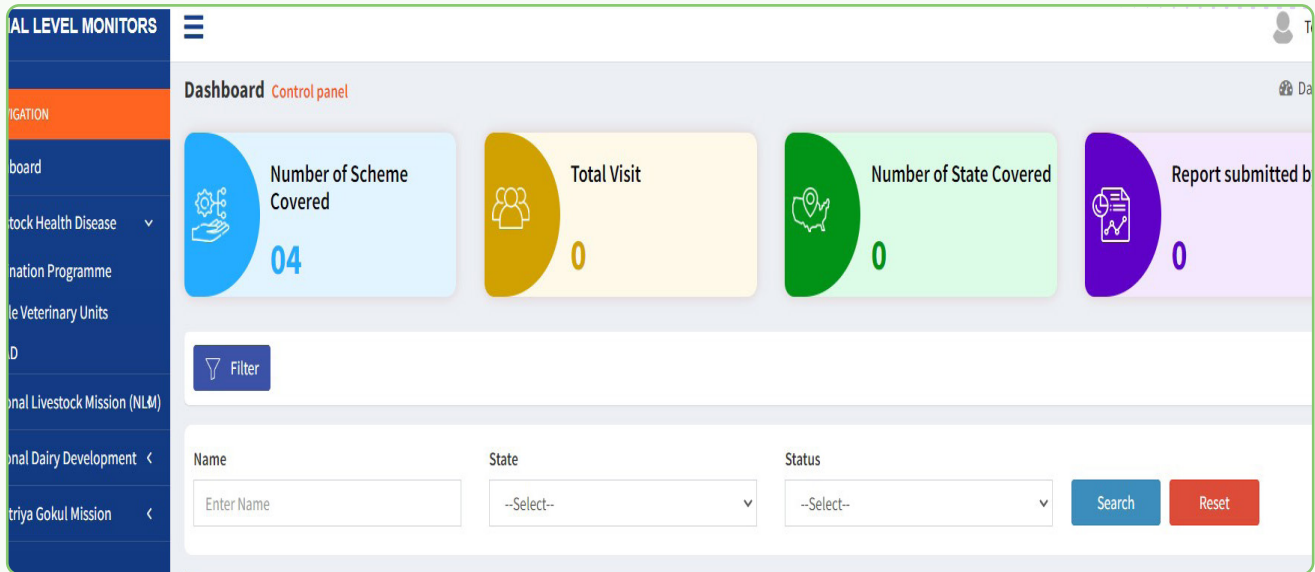


Note:

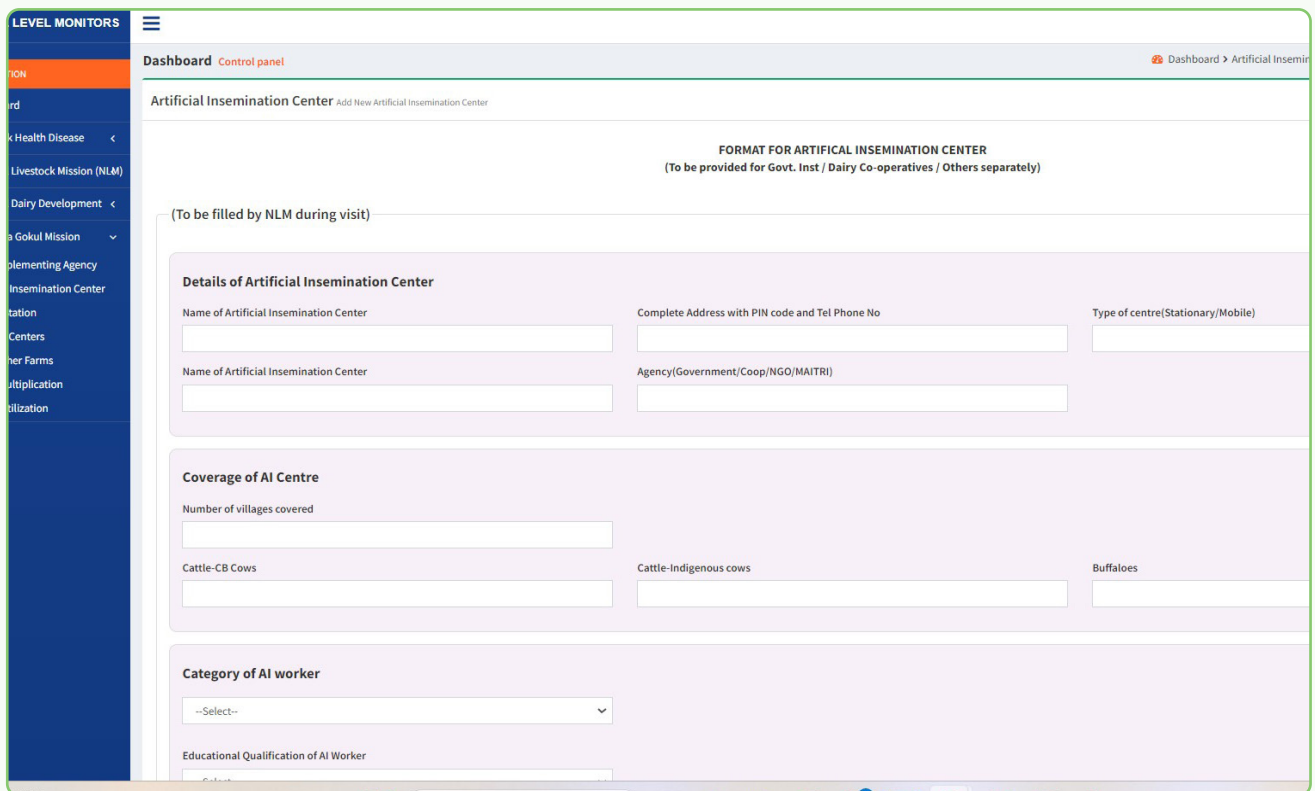
Since application is Role based, whenever the National Level Monitors or any other concerned user will enter their valid credentials (user ID & Password) the related part of scheme's form will appear as per their defined role.

- As the NLM or any user enter his/her Credentials, following screen will appear as per Roles:





- In the above Screen of Dash board, you may see Total number of Reports Submitted by NLM. This feature is only for selected Higher Officers.
- Concerned National Level Monitor (NLM) will select his/her Scheme, Then concerned Scheme Form will appear, as given in the below image: -



Supply of Inputs (Yes/No) Yes No

LN2 **Semen**
 Frequency of supply Frequency of supply

Breed of semen available

Exotic- Jersey/HF Crossbred Indigenous

Buffalo-Murrah /Others

Data uploaded on Bharat Pashudhan portal

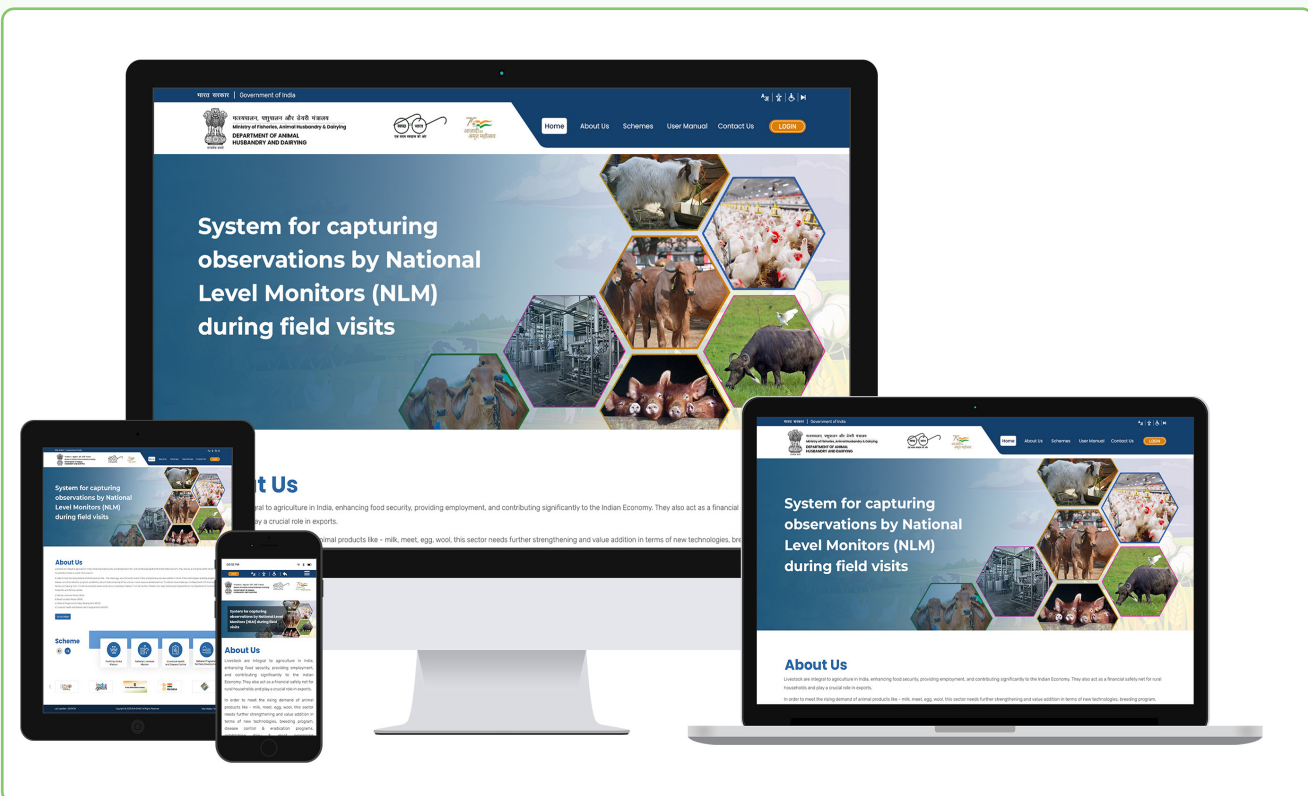
Uploading on portal regularly Uploading data on PD Uploading data on calf born

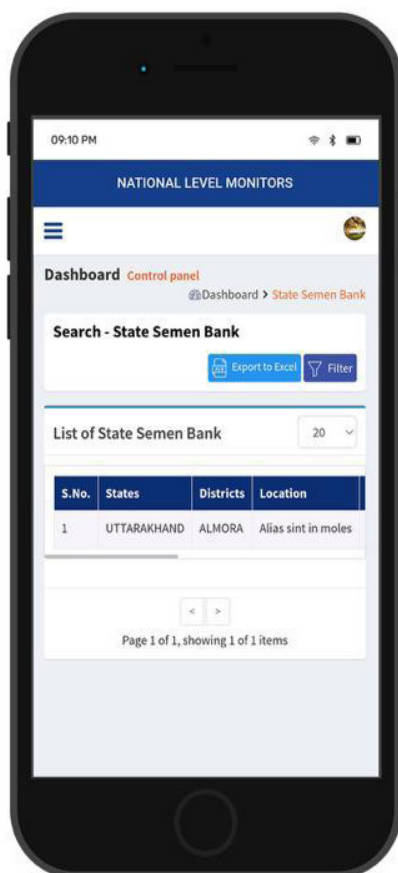
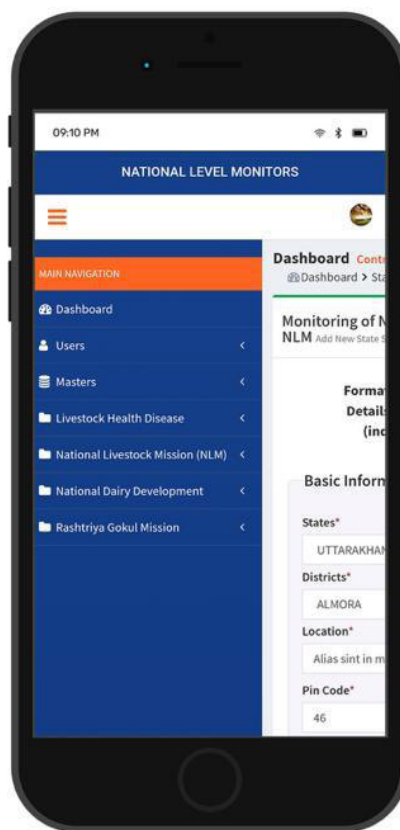
Delay in reporting

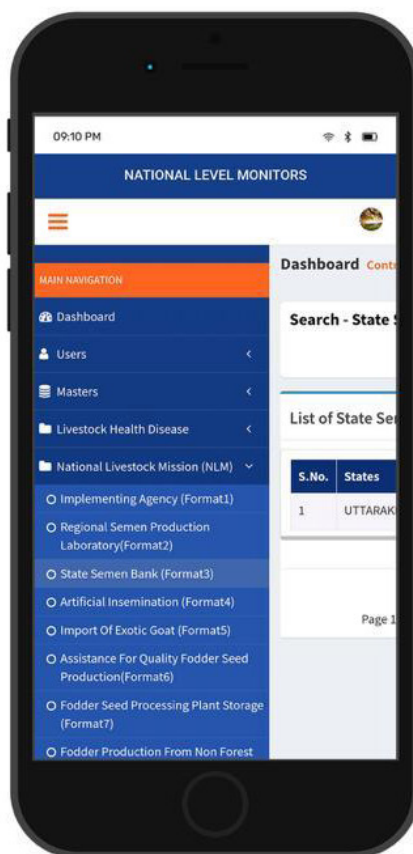
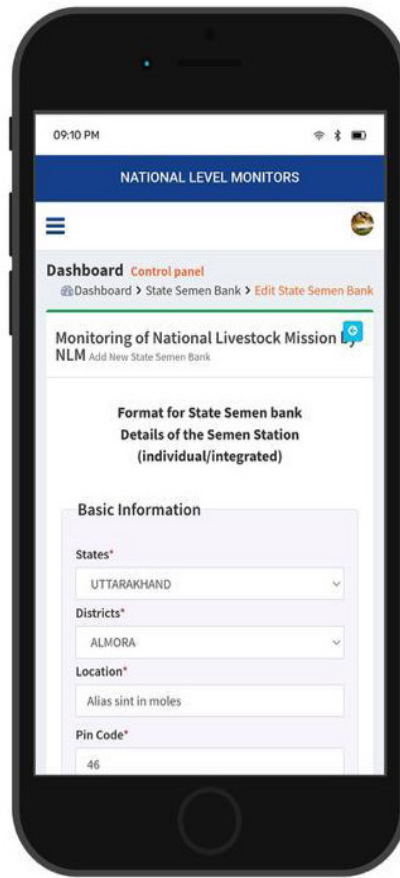
Views of NLM

[Save As Draft](#) [Submit](#) [Cancel](#)

- After Completion of the data entry in the concerned form, Option of “Save as Draft” or “Submit” will appear as shown in the above image.
- Web application is Mobile Responsive









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भारत सरकार



GOVERNMENT OF INDIA
मत्स्यपालन, पशुपालन और डेयरी मंत्रालय
MINISTRY OF FISHERIES, ANIMAL HUSBANDRY & DAIRYING
DEPARTMENT OF ANIMAL HUSBANDRY AND DAIRYING
(ANIMAL HUSBANDRY STATISTICS DIVISION)