

# **OPERATIONAL GUIDELINES FOR IMPLEMENTATION OF NATIONAL PROGRAMME FOR BOVINE BREEDING AND DAIRY DEVELOPMENT (NPBBDD) DURING 12<sup>TH</sup> FIVE YEAR PLAN PERIOD**

National Programme for Bovine Breeding and Dairy Development (NPBBDD) will have two components namely “National Programme for Bovine Breeding (NPBB)” and “National Programme for Dairy Development (NPDD)”.

## **1. OBJECTIVES :**

### **1.1 National Programme for Bovine Breeding:**

- a) to arrange quality Artificial Insemination services at farmers’ doorstep;
- b) to bring all breedable females under organised breeding through Artificial Insemination or natural service using germplasm of high genetic merits;
- c) to conserve, develop and proliferate selected indigenous bovine breeds of high socio-economic importance;
- d) to provide quality breeding inputs in breeding tracts of important indigenous breeds so as to prevent the breeds from deterioration and extinction;

### **1.2 National Programme for Dairy Development:**

- a) to create and strengthen infrastructure for production of quality milk including cold chain infrastructure linking the farmer to the consumer;
- b) to create and strengthen infrastructure for procurement, processing and marketing of milk;
- c) to create training infrastructure for training of dairy farmers;
- d) to strengthen dairy cooperative societies/Producers Companies at village level;
- e) to increase milk production by providing technical input services like cattle-feed, and mineral mixture etc;
- f) to assist in rehabilitation of potentially viable milk federations/unions;

## **2. DURATION OF THE PROJECT:**

National Programme for Bovine Breeding and Dairy Development (NPBBDD) will be implemented throughout the country during 12<sup>th</sup> Five Year Plan (2013-2017) Spill over activities of the projects will be continued during the 13<sup>th</sup> Five Year Plan.

## **3. AREA OF OPERATION:**

3.1 NPBBDD will be implemented throughout the country.

3.2 NPBBDD will finance all components in those States where National Dairy Plan, Phase I is not being implemented i.e in the following States and regions:

Delhi, Uttrakhand, Goa, Puducherry, Chhattisgarh, Jharkhand, Himachal Pradesh, Arunachal Pradesh, Assam, Meghalaya, Manipur, Mizoram, Nagaland, Sikkim, Tripura, Jammu & Kashmir, UT of Chandigarh, Daman & Diu, Lakshadweep, Andaman and Nicobar.

3.3 In the case of States covered by National Dairy Plan Phase-I (NDP-I) (i.e, Andhra Pradesh, Bihar, Gujarat, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, West Bengal), NPBBDD will cover those components that are not covered by NDP.

#### **4. FUNDING PATTERN:**

##### **4.1 NPBB Funding Pattern:**

NPBB Component provides for 100% grant-in-aid for all breeding related activities.

##### **4.2 NPDD Funding Pattern:**

NPDD will be implemented on 100 % grant-in-aid basis for all components, except for the following activities:

- 4.2.1 installation of bulk milk coolers;
- 4.2.2 milk processing plants;
- 4.2.3 milk powder plants; and,
- 4.2.4 rehabilitation Milk Unions/ federations

4.3 For the first three components, viz.- installation of bulk milk coolers, milk processing plants and milk powder plants,- the funding pattern will be as under:

- a) In NDP States -50% grant in aid.
- b) For Milk Unions/Federations of North Eastern States and of hilly areas (more than 1000 meter above sea level) in hilly States of Jammu & Kashmir, Uttarakhand and Himachal Pradesh, central assistance would be 90%
- c) For other non-NDP States:
  - i) For profit making EIAs-i.e. EIAs with accumulated profit of Rs One crore or more in the previous financial year - 75 % grant in aid
  - ii) For other EIAs-i.e. loss making EIAs and EIAs with accumulated profit of less than Rs One crore in the previous year- 90%
- d) For the component “Rehabilitation Plan” for assisting Milk Unions/ federations to become more viable- 50 % grant in aid.

#### **5. PROJECT FINANCIAL CEILINGS AND OTHER LIMITATIONS - UNDER NPDD COMPONENT:**

Central assistance ceilings under NPDD component will be as under:

- 5.1 Central assistance for the project shall be restricted to Rs 15.00 crores per District.
- 5.2 For milk powder plant, central grant per district shall be limited to Rs.5 crores per district.

**NOTE:**

- (i) For establishing /upgrading milk powder plant of 30 metric tonnes capacity, surplus milk from a milk shed covering a cluster of districts may be pooled to ensure economic viability of the powder plant.
- (ii) Central grant for establishing milk powder plant shall be limited to dairy cooperatives only.

- 5.3 Assistance for “technical input services” shall be subject to a ceiling of 15% of the project cost.
- 5.4 Assistance for cattle induction shall be allowed only for Scheduled Castes, Scheduled Tribes and BPL families.
- 5.5 Cattle Induction shall be subjected to a maximum ceiling of 10% of the total project cost.
- NOTE:* The Cost for this purpose of calculating subsidy shall include: i) cost of cattle, ii) animal insurance and iii) transportation cost.
- 5.6 The subsidy for Cattle Induction shall be restricted to 50% in all cases except for women farmers.
- NOTE:* In the case of for women milk producers the subsidy element for cattle induction shall have a maximum ceiling of 75% cost.
- 5.7 Assistance for manpower and skill development shall be provided for setting up and/or upgrading a Training Centre for skill development in the areas listed at **Annexure A**. The total assistance under this component shall not be more than Rs.75 lakh or 5% of the total project cost, whichever is lower.
- 5.8 Assistance for Information and Communication Technology networking shall be subject to a maximum ceiling of 10% of the project cost.
- 5.9 Rehabilitation assistance as central grant shall be restricted to a ceiling of Rs.5 Crores.
- 5.10 Assistance for Working Capital shall be restricted to the total value of “21 days-milk procurement”, as projected in the terminal year of the Project, by the End Implementing Agency.
- 5.11 Planning and Monitoring - limited to 5% of the project cost.

## **6. IMPLEMENTING AGENCIES:**

### **6.1 NPBB:**

- |       |   |  |
|-------|---|--|
| 6.1.1 | State Implementing Agencies <b>SIAs</b> -         | State Livestock Development Boards   |
| 6.1.2 | End Implementing Agencies <b>EIAs</b> -           | State Livestock Development Boards<br>State Animal Husbandry Departments,<br>State Milk Federations, CFSP&TI,<br>CCBFs |
| 6.1.3 | Participating Implementing Agencies <b>PIAs</b> - | Other agencies having a role in Bovine Dev.:-<br>ICAR,<br>Universities., Colleges, Institutions                        |

## 6.2 NPDD:

- 6.2.1 State Implementing Agencies SIAs – State Dairy Federations for States viz Andhra Pradesh, Bihar, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Nagaland, Orissa, Punjab, Rajasthan, Tamil Nadu, Uttar Pradesh, Himachal Pradesh, Uttarakhand, West Bengal; and, Milk Unions in remaining States and UTs
- 6.2.2 End Implementing Agencies EIAs - District Milk Unions, New Generation Milk Producer Companies (which are functional for at least one full financial year ending on 31<sup>st</sup> March of the previous financial year –in respect of projects on PPP model), District Rural Development Authority/Zila Parishad/District Mission Management Units (in respect of projects where there is no District Dairy Cooperative Unions).
- 6.2.3 Participating Agencies PIAs - Other agencies associated or affiliated to above SIAs or EIAs like NGOs, SHGs, Universities, Colleges, ICAR Institutes etc

## 7. BREEDING POLICY FOR BOVINES AND ATTENTION TO INDIGENOUS BREEDS.

- 7.1. NPBBDD will be implemented in the states which have a notified dynamic breeding policy and a definite action plan to operationalise the policy. Refer to Annexure B

## 8. INSTITUTIONAL SET UP FOR IMPLEMENTATION UNDER NPBBDD:

- 8.1. Funds will be released for the NPBB component to all SLDBs, being the State Implementing Agencies.
- 8.1.1. All States where the process of transfer of breeding related assets – like semen stations, bull mother farms, semen banks and depots- from the Directorate of Animal Husbandry/dairy cooperatives, to the State Livestock Development Boards has not been done shall complete the same within six months of the issue of these guidelines.
- 8.1.2. The SIAs will receive the project grants and channelize them to the End Implementing Agencies. Organogram for implementation of the scheme is given at Annexure-C

- 8.2. Funds will be released for the NPDD component to all State Milk Federations/Milk Unions, being the State Implementing Agencies.
- 8.2.1. Districts where there is no State Milk Federation or District Milk Union, DRDA/Zilla Parishad shall be the end implementing agency. For such districts, DRDA shall take up projects covering backward linking activities, while forward linking activities (i.e, setting up of milk processing plants) shall be on PPP model.
- 8.2.2. New Generation Milk Producer Companies shall take up projects on PPP model through SIAs.
- 8.3. Creation of a District level Implementation and Monitoring Committee under the Chairmanship of the Collector/District Magistrate/District Collector to meet on a regular basis.
- 8.4. Organogram for implementation of the scheme is given at **Annexure-D**

## **9. SUPPLEMENTATION OF FUND-FLOW FROM SOURCES OTHER THAN NPBBDD:**

- 9.1. The States may continue to augment fund flow from their own resources towards recurring and maintenance costs.
- 9.2. States can also augment fund flow from other sources like RKVY/other schemes having livestock component as well as multidisciplinary schemes of Ministry of Rural Development, Department of Agriculture & Cooperation, Department of Women & Child Development, Department of Biotechnology etc. This aspect is to be kept in view while formulating the proposals for NPBBDD.
- 9.3. Respective State/UT Governments or State/End Implementing Agencies shall bear cost of land for chilling centres, dairy plants, liquid nitrogen plants, cattle feed plant, storage godowns and non-plan salary of staff of Implementing agencies.

## **10. INSTITUTIONAL MECHANISM FOR REVIEW AND MONITORING:**

### **10.1. Central Level monitoring by DAHDF, GoI**

- 10.1.1. **NPBB:** Management Information System (MIS) in the form of INAPH will be utilized by the States. The reports MPR, and QPR should be submitted to DADF as per formats within the prescribed time frame such reports shall be discussed by DAHDF.
- 10.1.2. **NPDD:** Central Management Information System (CMIS) shall be established. After CMIS is operational, all SIAs and EIAs (wherever applicable) need to obtain their USERID and PASSWORD from the Department. All QPRs and Audited Annual reports shall be submitted to this Department as per formats within the prescribed time frame. Such reports would be evaluated under third party and peer group review/monitoring mechanism.

### **10.2. State Level Monitoring by Technical Management Committee:**

- 10.2.1. **NPBB:** Meeting of the governing body of the EIAs/TMCs shall be organized after every six months (September and March) to review progress of technical, physical and financial parameters and to remove bottlenecks quickly. The activity components proposed to be taken up under the state sub-project should have quantifiable targets and a time frame so that progress can be monitored periodically.

- 10.2.2. NPDD:** Technical Management Committee under the Chairmanship of Secretary in charge of dairy development of the State, shall be constituted with membership from the Departments of planning, finance, Veterinary, dairy development, State Dairy federation/ District Milk Union, Project Director of DRDA of the respective State Govt. There shall be one member from DADF, GoI representing the scheme in TMC. Minimum of five members from the above shall constitute the quorum of TMC. TMC shall be organized after every six months (September and March) to review progress of technical, physical and financial parameters and remove bottlenecks quickly.
- 10.3. Annual Workshop for Monitoring** Audit Report and the same shall be discussed in Annual Workshop involving participating agencies and experts.
- 10.4.** Assistance is available under NPBBDD for installation of computers at strategic locations to facilitate close monitoring of the project. The governing body of the EIAs shall keep a close watch on the activities and will ensure that there is no duplication. The EIA shall give an undertaking to this effect while submitting the Project.
- 10.5.** EIAs shall put in place an effective mechanism to reduce the gestation period of the projects to the barest minimum. This mechanism will be outlined in the Project Proposal.
- 10.6.** All EIAs shall follow the State Procurement Procedures and Guidelines. EIAs should attempt to streamline the process of procurement to develop synergies and cut down delays.
- 10.7.** Audited Annual Progress Report in the prescribed format shall be published by the EIAs within the prescribed time frame and circulated to all concerned.
- 10.8. Central Monitoring Units** and State Monitoring Teams will be constituted by the DADF and the SIA's respectively, for continuous monitoring and evaluation of the subprojects being implemented by the EIAs in the State.
- 10.9.** State Implementing Agencies/ End Implementing Agencies of the scheme shall comply with the Statutory guidelines vide Lok Sabha Secretariat's (Committee Branch II) Office Memorandum no. 18/1/2012-2013/CII/CLP dated 19.03.2013, to furnish audited accounts/ annual reports to enable this Department to lay their annual reports as per prescribed procedure for implementation of dairy development projects.
- 11. COST RECOVERY OF INPUTS & SERVICES TO DEPARTMENTAL AI NETWORKS - BUDGETARY SUPPORT THERE OF:**
- 11.1.** To ensure sustainability and viability of AI services, it is necessary to adopt a policy of recovering cost of inputs and services provided from the beneficiary farmers. It is essential that the AI fees may be deposited into the account of the EIA for creation of a corpus.
- 11.2.** In case a State Government chooses to subsidise AI fees in the case of Govt./semi Govt. EIAs, then the concerned State Government must provide adequate budgetary support to the EIA .
- 12. MEASURES TO ENSURE QUALITY OF GOODS AND SERVICES**

- 12.1.** Standards and specifications in the form of MSPs/SOPs formulated by GOI for Semen Stations, Pedigree Selection, Progeny Testing, AI technicians and bulls for Natural Service shall be implemented in letter and spirit.
- 12.2.** States should also formulate standards for the field AI network.
- 12.3.** Standards formulated by BIS for cryocontainers, castrators, AI consumables; feed, machinery, equipments etc shall be followed.

### **13. ACTIVITY COMPONENTS TO BE FUNDED**

#### **13.1. The list of the activities which will be funded under NPBB are as follows:**

##### **13.1.1 Extension of Field AI Net work**

- 13.1.1.1** Establishment of Private AI centres
- 13.1.1.2** Training of private AI workers
- 13.1.1.3** Equipments
- 13.1.1.4** Tapering grants
- 13.1.1.5** Refresher training of private AI workers (Rs 3000/worker)

##### **13.1.2 Strengthening existing AI centres**

- 13.1.2.1** Replacement of cryocontainers
- 13.1.2.2** Refresher training of existing AI workers

##### **13.1.3 Monitoring of AI programme**

- 13.1.3.1** Identification of females covered through AI (cost of tag)
- 13.1.3.2** Identification AI born calves
- 13.1.3.2** Computerization

##### **13.1.4 Development and conservation of indigenous breeds**

- a. Field performance recording
- b. Bull production programme (Natural Service)
- c. Registration of bulls used for natural service
- d. Reward to best bull keeper
- e. Establishment of breeders associations
- f. Assistance to Gaushalas (best germplasm)

##### **13.1.5 Managerial grants to SIA and grants linked to activities**

- a. Managerial grants
- b. Concurrent evaluation

##### **13.1.6 Manpower development**

- a. Development of training module & accreditation of training centres
- b. Establishment/Strengthening training centres
- c. Establishment of regional training centres
- d. Trainers training programme
- e. Training of professionals
- f. Organization of seminars & workshops

##### **13.1.7 Strengthening LN transport and distribution system**

- a. Bulk LN transport storage & distribution system upto AI centres
- b. Replacement of LN plants (in NER, J&K & Ooty)

##### **13.1.8 Procurement of bulls for natural service and AI**

- a. Procurement of male calves
- b. Feeding of male calves Procurement of bulls for AI

##### **13.1.9 Any other related items**

Further details of the above activities and mode implementation is given at **Annexure-E**

## **13.2 The list of the activities which will be funded under NPDD are as follows:**

### **13.2.1 Milk Chilling facilities at village, block, district level.**

### **13.2.2 Civil works**

### **13.2.3 Equipment for bulk milk coolers, chilling centres.**

### **13.2.4 Milk Processing & Marketing**

- i)** Processing and Marketing facilities [civil works and equipments for milk processing plants (including boiler and refrigeration system etc), milk powder plants, Milk product plants, transportation tankers, including refrigerated tankers, cold storage etc]
- ii)** Establishment of dairy marketing outlet/parlour (not limited to establishment within the state)
- iii)** Marketing infrastructure for preserving/ maintaining quality of milk i.e, insulated/refrigerated tanks/vans, deep freezer, Visi-coolers, refrigerators etc.
- iv)** Assistance for campaigning to increase awareness about advantages of clean milk production/ consumption of pasteurized milk to milk producers/consumers.
- v)** Can/Crate Washing facility/system.
- vi)** Effluent Treatment plant (ETP) including civil works.

### **13.2.5 Milk Procurement**

- i)** Capital Investment for DCS (including DCS - Building construction, Power supply/DG set, water supply system etc.)
- ii)** Collection of Milk through road milk tankers/ truck/van and/ or cans
- iii)** Management grant to DCS (on tapering basis- for 3-years only)
- iv)** Management grant to Union (for federations/unions, which do not have accumulated profit)
- v)** Transport subsidy on milk transport/ head load charges
- vi)** Transport subsidy on cattle feed transport
- vii)** Incentive for better quality milk

### **13.2.6 Cattle Shed**

- i)** Cattle Shed Construction (new shed construction/ strengthening for old sheds) (Civil works, fodder block storage godowns, Cattle feed godowns, Water supply system, Power supply system, Vermi-compost unit)
- ii)** Cattle farm mechanization (equipment, mechanization systems, tractor, D.G set)

### **13.2.7 Cattle Induction**

- i)** Purchase of animals
- ii)** Purchase of Heifer
- iii)** Cattle/heifer insurance
- iv)** Transportation cost of animals

### **13.2.8 Construction/Establishment of Milk and Milk Product Testing Laboratories**

- i)** 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
- ii)** Purchase of laboratory equipments (for chemical/ microbial (only for union/state level) analysis of milk and milk products)



- iii) Purchase of laboratory furniture
- iv) Purchase of vehicle/van/motorcycles for mobile testing laboratory for sample collection/spot testing of milk and milk products)
- v) System for quality assurance (HACCP/ISO) including equipment/computer hardware and software etc
- vi) Accreditation and certification of dairy establishments under HACCP/ISO

#### **13.2.9 Clean Milk Production Kit (for beneficiaries)**

- i) Detergent and sanitizer kit/ accessories
- ii) Stainless Steel utensil kit/ accessories
- iii) Milking machine & other equipments for hygienic milk handling at village/farmer level.

#### **13.2.10 Technical Input Services**

- i) FMD & other vaccines
- ii) First Aid Box
- iii) Audio Visual Kits etc.
- iv) Animal Health & Breeding Input Camps
- v) Fodder Development
  - a. Pasture Development
  - b. Fodder Seeds/Mini Kits Distribution
  - c. Chaff cutter
  - d. Fodder Storage Go downs
  - e. Fodder Block making unit
  - f. Tractor with trolley
- vi) Cattle Feed Development
  - a. Cattle Feed Storage
  - b. Cattle Feed Plant (compounding/ mixing & grinding plant)
  - c. Vehicle for feed transport (Trucks)

#### **13.2.11 Information and Communication Technology Networking**

- i) Purchase of Computers/handheld terminals with accessories
- ii) Purchase of Server System
- iii) Purchase/installation of Software systems (milk collection/distribution/billing, quality assurance, employee payroll, operating systems, antivirus etc)
- iv) Facilities for registration with RFID tag (including equipments/hand held devices for animal identification and data recording for Bolus tagging) for animals inducted under the programme

#### **13.2.12 Manpower and Skill Development**

- i) Co-operative Development Programme
- ii) Farmer Induction Programme/Training of farmers
- iii) Training of DCS staff/BMC/chilling centre
- iv) Training of farmers in good hygienic practices/ good manufacturing practices.
- v) Training of farmers for animal rearing/husbandry practices
- vi) Training of Dairy Personnel/milk tester (including Plant and Marketing staff)
- vii) Training of Management Committee Members & Board of Directors of Union
- viii) Institutional skill development (by implementing agencies)
- ix) A.H/ Dairy Extension activities (including ration balancing programme, use of area specific mineral mixture, Azolla cultivation).

**13.2.13 Working Capital (including purchase of milk powder, packaging material, cattle feed and fodder)** - Limited to not more than procurement price for 21 days of the targeted milk procurement.

**13.2.14 Rehabilitation of defunct/sick milk unions/federations**

- i) Outstanding milk bill payments.
- ii) Working capital for purchase of milk, cattle feed and packaging material - Equivalent to not more than cost of 21 days of targeted milk procurement
- iii) Strengthening of plant building and plant & machinery.

**13.2.15 Planning and Monitoring**

- i) **Pre-project Baseline survey** (by independent agency) and preparation of **project report**
- ii) **Concurrent evaluation** and in-depth independent evaluation of the project and **Post-project impact assessment survey**

**13.2.16 Centralised MIS facility for DADF**, Government of India for improved monitoring and control in implementation of projects under the scheme.

[Note – All or some of the above Major components as per actual needs of the project areas shall be considered for funding under the projects under NPDD. This list provides for major components along with their sub-components.]

**14. Maximum project cost will be:**

- Rs. 25 Crore for projects with processing capacity of 1 Lakh Litre Per Day, and
- Rs 15 Crores for projects with processing capacity upto 50 Thousand Litre Per Day.
- Rs. 10 Crore for projects with processing capacity upto 20 Thousand Litre Per Day.

**15 PROJECT PREPARATION AND SUBMISSION OF PROPOSAL**

- 15.2** 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.
- 15.3** The Project/subproject Proposals under NPBBDD shall ensure optimal resource utilization and shall discourage avoidable expenditure and duplication/ overlap of activities.
- 15.4** 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.
- 15.5** Under NPDD, the proposal may be prepared by furnishing requisite information as per prescribed Factsheet and Annexure I to Annexure XVII of the guideline. Guideline/ procedure for preparing of a new project proposal along with prescribed annexure I to XVII may be obtained from the DADF website. Essentials of preparation of new project proposals and detailed project report is given at **Annexure F**
- 15.6** The SIAs shall formulate a single comprehensive proposal for the State covering the requirement of the State and including the Projects/ Sub-Projects of the EIAs .
- 15.7** Six copies of the Detailed Project Report should be submitted to DAHDF timely, for appraisal and approval by the Project Sanctioning Committee.

**List of Training Institutes to be covered under Skill Development under NPDD**

Following training centres may be upgraded on mutually agreed terms and conditions between respective SIA and Administrative Body of training centres:

1. Training institutes of Central/State Agriculture/Veterinary/Dairy Science University/ Colleges.
2. Training centres of Krishi Vigyan Kendras
3. Training centres of Department of Animal Husbandry/Dairy Development of the State.
4. Training centres of State Milk Federations/District Milk Unions
5. Training centres of Milk Producer Companies

Note: Upgradation/strengthening of above training centres shall be taken up with the purpose of conducting/holding training of milk producer members of dairy cooperatives/ PRIs for a period of 3 years or more during implementation of the project under NPDD. SIA and Administrative Body of training centres may make such arrangement on mutually agreed terms and conditions.

**Essentials of State Breeding Policy and Action Plan**

- 1.** The breeding policy should be dynamic and, inter alia, cover the areas of: demand of milk, requirement of draught animal power for agricultural and transportation purposes, need to conserve breeds and breeding tracts, farming systems, production environments and availability of inputs as well as marketing channels.
- 2.** The action plan may include study of areas not covered under AI with a view to obtain a clear picture of natural mating systems so that a programme of phasing out of scrub bulls can be taken up by castration of scrub bulls and their replacement with good quality bulls of a suitable breed or increasing acceptance of AI. An effort may have to be made to propagate the advantages of AI among the farmers.
- 3.** The action plan will also have to address the issue of sourcing quality bulls of each category/genetic make-up, and identify either breeding tracts or breeding farms from where such bulls can be obtained. Simultaneously programmes are proposed to be taken up for production of quality bulls for natural service during the proposed scheme.

**ORGANOGRAM**  
**NATIONAL PROGRAMME FOR BOVINE BREEDING**

**Project Head Quarter**  
**DAHDF**  
PSC  
CMUs  
SOPs/MSP

**State Government**

- Notification of Breeding Policy
- Recommendation of proposal

**State Implementing Agency (SIA)**

Formulation of proposal  
Receive project grants directly from HQ  
Channelize grant to EIAs  
State level review committee  
Submission of UC/Annual report/audit report through State Government



**END IMPLEMENTING AGENCIES**

**DAH**

- Monitoring of: govt AIC, AITS
- Distribution of LN and semen in States not constituted LBD
- Estab/monitoring of MAITRI

**State Livestock Development Board**

- Distribution of semen and LN
- Estab/monitoring of MAITRI
- Bull production NS
- Bull procurement for AI & NS
- AITS
- Dev of indigenous breeds

**State Milk Federation**

- Estab/monitoring of MAITRI
- Bull production programme for NS
- Management of AITS
- Dev of indigenous breeds



**ORGANOGRAM**  
**NATIONAL PROGRAMME FOR DAIRY DEVELOPMENT**

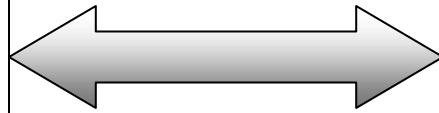
**Project Head Quarter**  
**DAHDF**  
PSC  
CMIS

**State Government**

- Recommendation of proposal and Dairy Development Work Plan
- Notification of State level Technical Management Committee

**State Implementing Agency (SIA)**

- Finalization of Dairy Development Work Plan
- Formulation of proposal
- Receive project grants directly from HQ
- Channelize grant to EIAs
- State level Technical Management Committee meetings and monitoring of project activities w.r.t. project outcome parameters/deliverables
- Submission of UC/Annual report/audit report through State Government



**END IMPLEMENTING AGENCIES**

**Deptt. of AH/ Dairy Development**

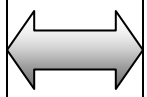
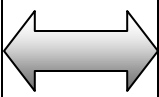
Monitoring of dairy development work plan

**District Rural Development Authority/Distt Management Unit**

- Implementation of project activities as per approved work plan
- Management of bulk milk coolers (BMC)
- Ensuring organization of village level PRIs
- Ensuring supply of chilled milk to Milk unions/milk processing units of Milk Producer Companies
- Creating awareness of cooperative dairying among milk producers and consumption of pasteurized milk among milk consumers

**State Milk Federation/ District Milk Union**

- Implementation of project activities as per approved work plan
- Management of dairy establishments
- Ensuring organisation of village level dairy cooperatives societies (DCS)
- Ensuring collection of milk from DCSs/BMCs and distribution of pasteurized milk to the consumers of the project area.
- Creating awareness of cooperative dairying among milk producers and consumption of pasteurized milk among milk consumers



## **Details of the Activities Covered under National Programme for Bovine Breeding (NPBB) and Mode of Implementation**

- **Streamlining Storage and Supply of Liquid nitrogen:**

It is proposed that the gains made during implementation of National Project for Cattle and Buffalo Breeding in streamlining supply of liquid nitrogen will be consolidated further. Infrastructure for bulk transport, bulk storage and supply of liquid nitrogen will be created under the component. Funds will also be made available to the hilly and North Eastern States for procurement of LN plant.

- **Bull Production Programme:**

This component will be undertaken to produce bulls only for natural service. Component is proposed to be accomplished through field performance recording programmes by State Implementing Agencies, Dairy Cooperatives, Breeders Associations and other agencies. Under the component identification and tagging of superior germplasm and rearing of male calves suitable for breeding at calf rearing centres up to breeding age will be done. Incentive to the farmers is also proposed under the component. Bulls of mainly indigenous breeds will be produced under the component. Agencies engaged in bull production programme for natural service will strictly adhere to Standard Operating Procedure for production of bulls for natural service.

- **Distribution of Disease Free Bulls of known Genetic Merit for Natural Service:**

Quality bulls for natural service will be distributed in the areas which are not under AI coverage. Some of the owners of indigenous breeds in the breeding tract do not accept AI for breeding their animals and resort to natural mating. Quality breeding bulls will be provided to these breeders to avoid degeneration of their stock. Bulls for natural service will be sourced from the progeny testing areas covered under National Dairy Plan-I and bull production programme proposed to be taken up under National Programme on Bovine Breeding (NPBB). Bulls will be given to bull keepers identified by Gram Panchayats on 50% subsidy basis. Funds are also proposed under the component for regular testing of bulls against Brucellosis, Tuberculosis, Johnes disease, etc. All the bulls proposed to be provided under the component will be insured for a maximum of three years. In order to avoid inbreeding bulls for natural service are proposed to be rotated between villages after every three years.

- **Quality Control of Goods and Services at Sperm Stations, Semen Banks and Training Institutions:**

This is proposed to be achieved through formulation of SOPs and MSPs and evaluation of semen stations, semen banks and training centres by CMUs. Strengthening of A & B graded semen stations will be covered under NDP-I. Semen produced by C & D graded semen stations will not be utilized under NPBB. States maintaining C & D graded semen stations will be requested to upgrade the quality of semen station to A & B or to lose the operation of these stations and to procure semen straws from A & B graded semen stations for use in breeding programme supported under NPBB.

- **Extension of Private Mobile AI Practice for Door-Step Delivery:**

This is proposed so that private mobile AI practice for door-step delivery will be further extended by introduction of 30,000 new private AI workers. This will be accomplished by extensive training in AI, support for acquisition of equipments, tapering grants during initial practice period, performance linked incentives and provision for regular delivery of frozen semen and liquid nitrogen at cost. Private AI workers will be trained at accredited training centres. The basic training will not be less than 3 months and not more than 6 months. Uniform training module for training of private AI workers will be developed in consultation with the experts from States, NGOs and NDDDB. Private

AI workers will be established through service providers engaged by the participating States. It is proposed that initially private AI worker proposed to be established under NPBB will be under the control of service providers and after 3-5 years these workers will be managed by Panchayati Raj Institutions. Private AI workers proposed to be established under NPBB 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 is also proposed to be conducted through these private AI workers under NPBB. Local resource person(LRP) proposed to be established under NDP-I will also be considered during establishment of private AI workers.

- **Replacement of Equipments and Cryocontainers at AI centre:**

Cryocontainers and AI kits need replacement after every 5 years in order to maintain quality of breeding programme. Funds are proposed under the project for replacement of cryocontainers and AI kit (AI kit bag, straw cutter, thermometer, thawing kit, AI gun, AI gun holder, AI sheath holder, dip stick, stove, thermos flask etc).

- **Control of Infertility among Bovines:**

This is proposed to be achieved through organization of fertility camps, farmers training programme. Funds are required under this component to purchase medicines including hormones to control infertility among dairy animals. Each State will be requested to train at-least 50 male farmers and 50 female farmers during the camp. **Estrus synchronization** will be also be taken up in some areas of advanced dairy States on pilot basis under the component. States will be

- The project will also sanction any other component not listed above but considered essential and consistent with its objectives for successful implementation of the project.
- Following priorities are set for implementation of the scheme during current year:
  - a) Strengthening existing semen stations graded as C & D by CMU
  - b) Streamlining LN storage, transport and distribution system
  - c) Training and retraining of existing private AI worker to establish them as multipurpose worker
  - d) Development and conservation of indigenous bovine breeds including Mithuns
  - e) Establishment of private AI workers in areas not covered under AI
  - f) Procurement of bulls for natural service
  - g) Testing and registration of bulls used in natural service

**Annexure F**

**Essentials for preparing and applying for financial assistance under “National Programme for Dairy Development (NPDD)”**



The new project proposal would comprise of following:-

1. Background for dairy development in the State as a whole, the project districts giving details of prevailing milk procurement, processing and distribution, marketing system justifying the need for a new project.
2. Profile of the implementing agency.
3. Baseline survey shall evaluate dairy development potential, infrastructural facilities available and market demand of milk of the proposed project area. The report providing an executive summary, basis of selection of district/Block/village etc, methodology and outcome of the survey. The outcome of the survey report should invariably be used for setting up of project targets.
4. Technical aspects of the project proposal explaining requirement of each and every components/items supported with figures and justification. The content would also cover a brief breeding plan during project period.
5. There are seventeen annexure to be filled up for preparing new project proposals. Among these, annexure-I to VII requires primary data of the project area & the State, which are to be validated by the agency conducting baseline survey. Annexure-VIII to XVII requires information on project activities, project operation cost estimates, etc. There are to be prepared based on the outcome of the survey and data available with the Implementing agency/State Government. Annexure may be downloaded from the website of the Department.
6. A map of project districts locating the project area, milk routes, existing & proposed Animal Husbandry & Dairy Infrastructure including dairy & chilling plants, BMCs, DCS (with dots) etc to give a fair idea about the project.

**Procedure for Applying:** District wise project to be prepared based on a baseline survey (conducted by an independent agency) and as per guidelines of the Scheme and to be submitted through the concerned State Government. A project may include one to five districts depending upon the capability of implementing agency to be implemented in a period of three to five years. Project proposal comprising of detailed project report (DPR) and baseline survey report shall be submitted to the Joint Secretary (Dairy Development) to the Government of India, Department of Animal Husbandry, Dairying & Fisheries, Ministry of Agriculture, Krishi Bhawan, New Delhi.

## **ILLUSTRATIVE FORMAT FOR SUBMITTING PROPOSALS under NPBB**

### **SUMMARY OF THE PROPOSAL (Chapter -I)**

1. Introduction and background of cattle and buffalo breeding in the state giving basic data , map (depicting home tract of breeds), genetic resources and production environment
2. Strategies and programmes to achieve the objectives
3. Objectives and physical targets
4. Details of cattle and buffalo breeding activities to be undertaken
5. Institutional frame-work, infrastructure and manpower
6. Detailed comprehensive year-wise project cost estimates
7. Financial implications and analysis
8. Benefits to be derived and justification of the project proposal
9. State level monitoring mechanism
10. Time frame for implementation and important milestones

### **A. General: (Chapter-II)**

1. (a) Target & allocation and expenditure & achievements under National Project for Cattle and Buffalo Breeding.  
(b) 11<sup>th</sup> & 12th Plan Allocations in State Plan on Cattle and buffalo breeding projects.
2. Mechanism, for project monitoring review of progress (Technical Management committee/Monitoring Committee).
3. Details of achievements made during NPCBB.
4. Brief account of participation in bilateral / multilateral projects and achievements thereof (if any).
5. Role of major players in cattle and buffalo breeding.
  - a) State DAH
  - b) Cooperative Dairy Federation/ NGO/Breed Society/Gaushala
  - d) University/ICAR Institute/KVK, etc.
  - e) Corporation/autonomous bodies.
  - f) Bilateral / Multilateral Aid Agencies
  - g) Others

6. Composition of cattle and buffalo population  
(Estimates to be provided district-wise in the format given in Annexure- I)
7. Importance of cattle and buffalo in the state with special reference to indigenous breeds and Breeding Policy for them (Copy of notification to be enclosed).
8. District wise breeding plan, their objectives and output, preferably with a location map of the project area.
9. Map showing important infrastructure/institutions with distance from District Head quarters.
10. Production environment and District-wise profile of farmers (Annexure- II)
11. Details of rate-contract with manufacturers / suppliers of equipment / Consumables (item-wise) required for breeding activities and tenure of its validity.

## **B. Information on Present Infrastructure (Chapter-III)**

### **I. Delivery network for breeding inputs (Annexure - III)**

### **II. Important Breeding Infrastructures and their location**

(Installed Capacity & Capacity Utilization to be indicated wherever applicable)

1. Frozen semen bull stations (Govt./ Coop./ NGO/ Private)  
(Questionnaire attached)
2. F.S. Banks / Depot
3. Availability of LN from private suppliers (Industrial gas manufacturer/Fertilizer plant/ Steel plant)
4. Present LN transport and distribution system
5. Field AI network
6. Training facilities
7. Farms/Goushalas (Breed, strength of breedable females, farm standard, functional parameters). (Questionnaire attached).
9. Breeding tracts of indigenous breeds (Distt./Taluka etc. breed-wise) and estimated population of breeds.
10. Milk Union / Federation (by no. of DCS / members)
11. Details of the milk processing facilities available in the State. (No. of chilling plants and Bulk Milk Coolers and their capacity).
12. Performance recording network, No. of recording centers, and No. of Animals under recording (Developed in the State)
13. Status of the ET lab ( if available)

### **III. Other related Institutions**

(Vety. dispensary, hospital, polyclinic, diagnostic & pathological lab. etc.)

## **C. Functional (Chapter-IV)**

1. No. of AI done, semen produced, semen purchased ( breed/genetic group-wise)  
[Indigenous, Crossbred, Exotic, Buffalo ]
2. LN<sub>2</sub> consumed, produced and purchased.
3. Quality of bulls used for semen production, mode of selection
4. Categorization of AI Centres as per No. of AI per year

5. Conception rate and the basis of calculating the same
6. Milk production
7. Processing facilities
7. Field recording network , their area of operation and productivity of the recorded animals
8. Mechanism for TB./JD./brucellosis /IBR detection
12. No. of abortions and birth defects reported

**D. General economic parameters (Chapter –IV)**

1. Cost of feed and fodder
2. General fodder situation, with reference to areas with adequate availability and deficit areas
3. Areas with endemic deficiency of minerals and micro/nutrients
4. Cost of live animals, both male and female, adults and calves
5. Price of milk
6. Service charges for natural service/AI

**E. Demand and supply of bulls and semen (Annexure - IV)**

(10 years demand and supply for bulls and semen to be given)

**F. Targetted coverage of bovine females, production of bulls and semen**

(Annexure - V)

**G. Estimated yield from the project.**

**H. i) Activity components that may be funded (Chapter –V)**

(SIA should provide year-wise break up of physical targets and financial requirements)

**ii) Explanatory note justifying the activity components & cost estimates and Indicating benefits of the proposed state project with reference to items 1 to 11**

**K. Additional comments relevant to the proposal:**

**Questionnaire on Farms / Goshalas**  
**(To be provided for each farm separately and information on iv & v to be provided breed-wise)**

- (i) Location and exact postal address with PIN Code and telephone No
- (ii) Year of establishment and brief history (i.e established with central assistance/as an externally assisted project/a project under ICAR-SAU)
- (iii) Designation of Officer- in-charge
  - i. and his/her academic qualification/ specialization
- (iv) Age group and sex-wise herd strength
- (v) Age (order of lactation) and production (best lactation) profile of milch cows/buffaloes (to be presented in tabular form, splitting the range of production from the farm standard to the best production record of existing animals into three categories)

	Below farm-standard	Production range I	Production range II	Production range III	Total
I Lactation					
II Lactation					
III Lactation					
IV Lactation					
Above IV Lactation					
Total					

- (vi) Farm-standard, breeding policy and general feeding and management practices
- (vii) Disease testing calendar and protocol
- (viii) Whether natural service allowed or AI practised exclusively
- (ix) Annual culling rate, wet and herd averages of past five years
- (x) Area under cultivation (irrigated and rainfed)
- (xi) Equipment available for mechanised farming
- (xii) Quantity of fodder procured annually from outside
- (xiii) Mode of milking(manual/machine)
- (xiv) Mode of disposal of milk
- (xv) Off-take of male calves for breeding purposes (annual)

Annexure - I

*Composition of cattle and buffalo population in thousand heads - District-wise estimates*

District		Cattle					Buffalo		
		Nondescript	Indigenous breeds *	Cross-bred	Exotic	Total	Nondescript	Descript breeds	Total
I.	a. Total male								
	b. Total female								
	c. Breedable female								
II.	a.								
	b.								
	c.								
III.	a.								
	b.								
	c.								
IV.	a.								
	b.								
	c.								

\* If there are more than one indigenous breeds, breed-wise estimates, wherever available, are to be given.

*District-wise breeding network*

District	Breedable bovine population ('000)	Artificial insemination centers										Total No. of AI/ year	% population covered under AI	No of centers/ units providing natural service
		Stationary					Mobile							
		DAH	OF COOP	NON-OF COOP	NGO	Private	DAH	OF COOP	NON-OF COOP	NGO	Private			

DAH - Director of Animal Husbandry; OF Coop - Operation Flood Cooperative;  
 NON-OF Coop - Non Operation Flood Cooperative; NGO - Non-Government Organisations.

**Demand and supply of bulls and semen**

Semen (in million doses)	For artificial insemination					For natural service		
	Exotic	C.B.	Ind.	Buff.	Total	Ind.	Buff.	Total
(a) Demand						--	--	--
(b) Supply						--	--	--
<b>(c) Shortfall</b>						--	--	--
Bulls (in Nos.)								
(a) Demand								
(b) Supply								
<b>(c) Shortfall</b>								



### Annexure - IV

#### Targeted coverage of bovine females (million nos), production of bulls (nos.) and semen (million doses )

Type of Animal		Adult fem. popn. size	Bred. f em. Target size	No. to be bred annually	Semen doses required	Bulls required for AI	Bulls Re-quired for NS	Remarks
Defined Indigenous Cattle breeds	AI							Both AI and natural service to be used in breeding tracts for pure breeding
	NS							
Nondescript cows	Grading up (AI)							Grading up nondescript cows with semen of indigenous bulls
	Grading up (NS)							Grading up N D cows through natural service by indigenous bulls
	Cross breeding(AI)							AI with Semen of exotic breeds
	Cross breeding (NS)							Bulls of exotic breeds for natural service
<b>Total Indigenous Cows</b>								
CB cows interse mating	(AI)							Interse mating by crossbred bulls
	(NS)							
Total cattle								
Defined buffalo breeds	AI							Both AI and NS will be used in the breeding tracts of buffaloes
	NS							
Subtotal								

Nondescript buffaloes	AI							Non-descript buffaloes will be graded up with descriptor breeds both by AI and NS
	NS							
Subtotal								
Total buffaloes								
<b>Total(cattle &amp; buffaloes)</b>								

**Other important areas for monitoring under National Project for Cattle and Buffalo Breeding**

**1. Mobile AI Operators:**

- (i) Contact point
- (ii) Area covered
- (iii) Total number of AI operators in the area
- (iv) Breedable bovine population
- (v) Number of artificial inseminations conducted
- (vi) Number of animals covered
- (vii) Number of animals declared pregnant
- (viii) Number of calves born
- (ix) Average conception rate
- (x) Incidences of abortion/birth defects

**2. Cryo-containers of various sizes**

- (i) Combination of cryo-containers required at field AI centres (stationary & mobile)
- (ii) Inventory of damaged / repairable cryo-containers
- (iii) Requirement of cryo-containers of various sizes

**4. Castration of scrub bulls and their replacement**

- (i) Location of castration camps / centers
- (ii) Number of scrub bulls castrated
- (iii) Number of good quality bulls supplied as replacement
- (iv) Number of unserviceable castrators
- (v) Requirement of castrators

## **CHECK-LIST**

1. Whether maps (location maps for on-going projects, infrastructures/institutions, breeding tracts etc.) and basic data has been given
2. Whether all-important agencies engaged in cattle and buffalo development have been involved
3. Whether notification concerning breeding policy for cattle and buffalo in the state has been given
4. Whether standards for selection of breeding bulls/bull mother of each genetic group (purebred exotic, crossbred varieties, purebred indigenous and buffaloes) have been finalized and sources of obtaining breeding material / animals identified
5. Whether proposal has approval of state Government
6. Whether state level monitoring mechanism has been finalized
7. Whether steps towards transfer of assets to SIA has been initiated
8. Whether steps to ensure mobility of AI workers has been taken
9. Whether steps to develop MIS for breeding activities has been taken
10. Whether conservation plan for indigenous breeds has been incorporated in the proposal