OPERATIONAL GUIDELINES FOR IMPLEMENTATION OF GENETIC UPGRADATION PROGRAMME THROUGH HIGH YIELDING INDIGENOUS BREED (HY-IB) BOVINE SEMEN AND DELIVERY OF QUALITY AI SERVICES AT FARMERS DOORSTEP DURING KRISHI KALYAN ABHIYAN IN 25 IDENTIFIED VILLAGES OF EACH 112 ASPIRATION DISTRICTS.

1. INTRODUCTION:

Genetic upgradation programme through High Yielding Indigenous Breed (HY-IB) bovine semen and delivery of quality AI services at farmers' doorstep during Krishi Kalyan Abhiyan in 25 identified villages of each 112 aspiration districts". The sub scheme will be covered under the scheme Rashtriya Gokul Mission under the component of development and conservation of indigenous breeds as per the guidelines of the scheme. The activities of the sub-scheme will be implemented from the funds available funds for RGM.

2. OBJECTIVES :

The sub-scheme will be implemented with the objectives to:

a) extend AI coverage in aspirational districts, to national average & beyond;
b) enhance milk production and productivity of bovines and thereby making milk production more remunerative to the farmers in these districts.
c) promote AI using semen of indigenous breeds thereby leading to development and conservation of indigenous breeds.

3. DURATION OF THE PROJECT:

All the activities of the project will be completed over a period of $2^{1}/_{2}$ months. Monitoring of the project and follow-up of all the animals covered under the programme shall be continued beyond the project period as mentioned in the guidelines of the scheme.

4. SCOPE AND AREA OF OPERATION:

4.1 **Area:** The sub-scheme Rashtriya will be implemented in 25 identified villages of each 112 aspiration districts identified by Niti Aayog (details give at Annexure-I).

4.2 **Scope:**

4.2.1 In the aspirational districts identified by Niti Aayog AI coverage ranges between 10 to 15% on an average against the country average of about 30% this indicates poor implementation of breeding programme in these districts (Annexure-II). Due to low AI coverage farmers are not getting benefits of productivity enhancement programme. In order to make milk production more remunerative to the farmers it is essential to enhance AI coverage in these districts.

4.2.2 To make breakthrough in the above stated situation it is proposed to implement genetic upgradation programme through delivery of quality AI services at farmers' doorstep during Krishi Kalyan Abhiyan in 25 identified villages of each 112 aspirational districts. HYIB bull semen to be used for AI should meet standard and specification prescribed in MSP and dams lactation yield should not be below 3000 kgs/lactation. Under the proposed programme AI services will be delivered to farmers free of cost.

4.2.3 During the period 2800 villages in 112 districts will be covered and in each village 100 animals will be covered through artificial insemination using semen of high yielding indigenous breeds HYIB. Crossbreds yielding less than 8 litres of milk per day per day may also be considered for backcrossing with HYIB bovine semen as per State breeding policy. However, in no case crossbreds yielding more than 8 litres/day be backcrossed with HYIB bovine semen. Cost per dose of semen is expected to be Rs 25/dose which includes cost of semen doses, transportation, storage and AI consumables. Approximately 8.40 lakh AIs are required be performed in these villages taking conception rate as 33%.

4.2.4 Incentive @ Rs 50 /AI will also be made available to AI technicians for performing AI using semen of HYIB bulls. For each calf born incentive will be made available @ Rs 100 after recording its birth on INAPH data base. About 100 calves will born out 300 AI conducted in each village. This will promote AI using semen of indigenous breeds and lead to development and conservation of indigenous breeds.

4.2.5 The proposed activity will be covered under the scheme RGM under the component of development and conservation of indigenous breeds as per the guidelines of the scheme.

4.2.6 All the animals covered under the programme shall be identified using UID and their data shall be uploaded on INAPH data base. After AI the animal shall be followed up and all the events shall be recorded on the data base till the birth of the calf. Tablets made available under Pashu Sanjivni component of RGM shall be used by AI technician for uploading data on INAPH database. Trainers training have already been completed and training of all the technicians shall be organized with the help of these TOTs.

4.2.7 If tablets are not available printed data entry sheets shall be printed by Livestock Development Board (LDBs) and made available to AI technicians. AI technicians shall records information on the data sheet and same shall be uploaded on INAPH data base from stationary data recording centres established under RGM and NADRS.

5. FUNDING PATTERN:

The sub-scheme will be implemented as per the funding pattern approved under RGM.

6. IMPLEMENTING AGENCIES:

6.1 State Implementing Agencies (SIA's) -	State Livestock Development Boards
6.2 End Implementing Agencies (EIA's) -	• State Livestock Development Boards

	• State Animal Husbandry Departments, • State Milk Federations • Reputed NGOs BAIF and JK trust
5.2 Participating Implementing Agencies (PIA's)-	Other agencies having a role in Bovine Development like

7. Action Plan:

7.1 AI technicians (Government/ DCS/Private/NGO) working in the area may be engaged for delivery of AI services at the farmers' doorstep.

7.2 AI technician will perform AI following SOPs and MSPs formulated by Government of India.

7.3 AI technicians will be given one day orientation in AI technique in order to achieve higher conception rates and trained in uploading data on INAPH data base. The funds upto Rs 500 can be met by SIA/EIA out of the assistance released under the RGM.

7.4 Each AI technician identified for the activity will be given tablet for which funds are already given to the States under Pashu Sanjivni component of RGM. If tablets are not procured by LDBs/DAH data sheets shall be made available to AI technicians and data recorded by AIT shall be uploaded on the INAPH data base from the stationary centres having desktops. Funds for printing data sheets may be met by the SIA/EIA from the funds released under RGM.

7.5 All the animals covered under AI shall be identified using UID and their data will be uploaded on INAPH data base through tablets procured under Pashu Sanjini component of RGM. All the animals covered shall be given ***Nakul Swasthya Patra*** from the funds released under RGM.

7.6 Calves born through AI will also be identified using UID and data generated will be uploaded on INAPH data base through tablets procured under ***Pashu Sanjivni*** component of RGM.

7.7 After covering 100 breedable animals per village remaining doses shall be made available to other villages in the district.

7.8 Procure semen doses of high genetic merit bulls of HYIB preferably from A graded semen stations with dams standard lactation milk yield of 3000kgs and above (list of semen stations is given at Annexure-I).

7.9 Cost of procurement of semen doses will made available under the proposed activity @ Rs 25/straw including cost of semen, transportation and its storage. Semen doses will supplied by LDBs at free of cost to the AI technicians.

8. INCENTIVE TO AI TECHNICIANS:

- Incentive will be made available to the technician @ of Rs 50/ per AI and after that Rs 100 per calf born. Payment will be based on the data available on INAPH data base.

- Each AI technician will perform 3 AIs in period of about 65 days (three estrus cycle). In case of cattle and buffalo estrus cycle is of 21 days duration.

- Incentive will be transferred through DBT to AI technicians as per the guidelines issued by GoI.

9. Details of the activities covered under the programme are depicted in the following table:

S. No.	Item	Total
1	No. of villages to be covered per district	25
2	No. animals covered per village	100
3	No. AI conducted per village	300
4	Total No. of AIs performed per district	**7500**
5	No. of semen doses required (10% extra over number of AI)	8250
6	Cost of Semen doses including consumables, transportation and storage (in Rs)	206250
7	Incentive to AI technicians @ Rs 50 per AI (in Rs)	375000
8	Incentive to AI technicians after birth of each calf @ Rs 100 per calf (100 calf per village) in Rs	250000
9	Contingency grant	
9.1.	Upto @ Rs 400 per village for leaflets, pamphlets and wall writing (in Rs) and monitoring of progress	10000
9.2	Upto @ Rs 27500 per district, for publicity, storage and transportation of semen doses & AI consumables	27500
	Total per district	868750

10. INSTITUTIONAL MECHANISM FOR REVIEW AND MONITORING:

10.1 At the level of the district scheme will be monitored by Krishi Vigyan Kendra, where daily AI report shall be uploaded. From the village AI report shall be obtained

by district Animal Husbandry Officer (DAHO) through SMS from the designated lead AI worker or local veterinarian, who will upload it in district KVK, on the Krishi Kalyan Abhiyan Portal.

10.2 Data uploaded by AI technicians / stationary AI centre with desktop facility on INAPH data base will be used in online monitoring of the project activity.

10.3 At the level of the State scheme will be monitored by State Animal Husbandry Department and other major players engaged in cattle and buffalo development.

10.4 State Animal Husbandry Department shall constitute Technical Monitoring Committee (TMC) and hold the meeting of TMC at regular interval.

11. MEASURES TO ENSURE QUALITY OF GOODS AND SERVICES

11.1 Standards and specifications in the form of MSPs/SOPs formulated by Government of India shall be implemented in letter and spirit.

11.2 Standards formulated by BIS for cryocontainers, castrators, AI consumables; feed, machinery, equipments etc shall be followed.

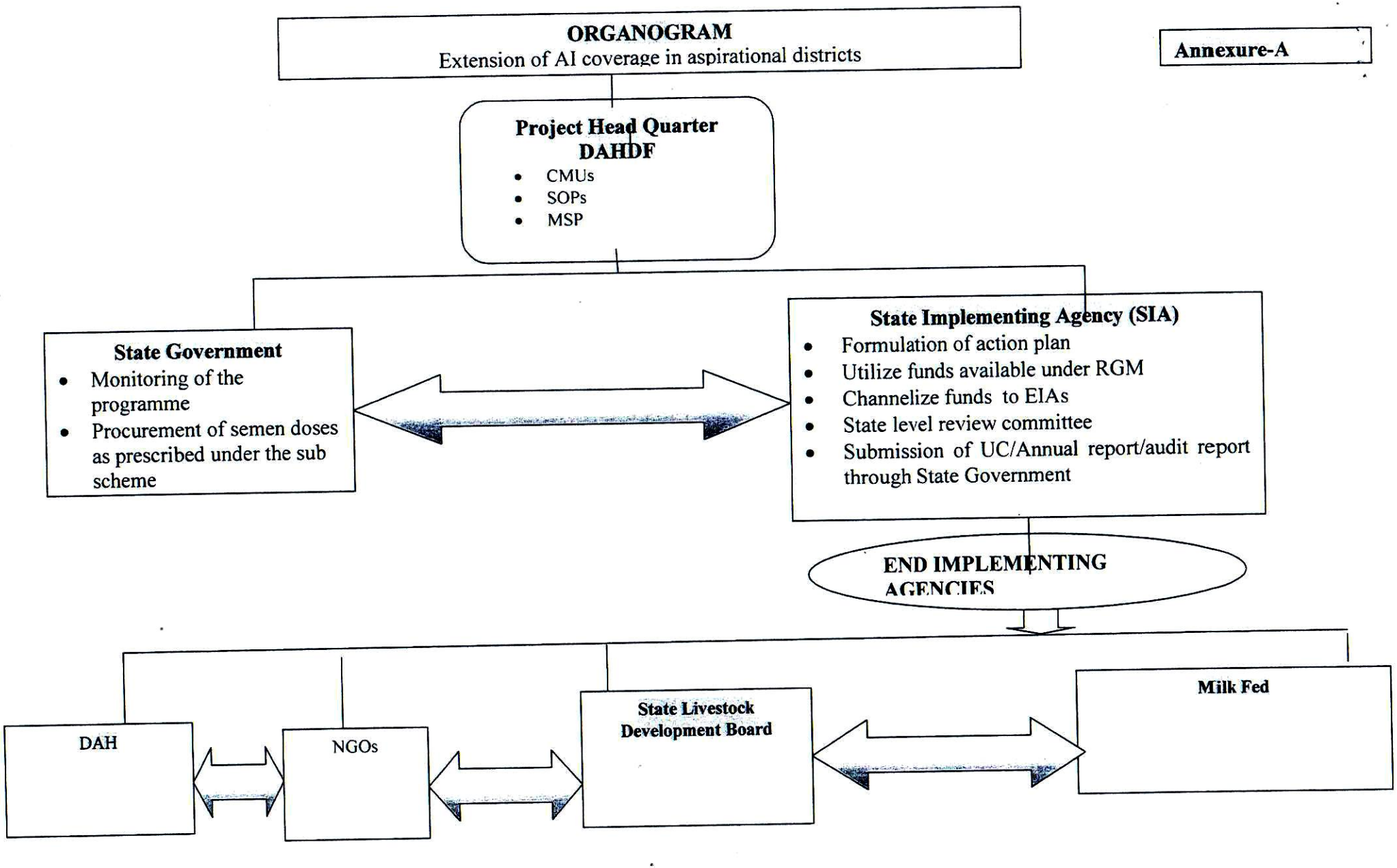
12. IMPACT ANALYSIS:

12.1 Third party evaluation will be under taken in a sample size of 10% districts covered under sub-scheme, the term of references shall include a) constraints faced during implementation; b) success rate of AI; c) number of pregnancies reported; and d) different elements including UID and uploading data on Information Network for Animal Productivity & Health (INAPH) data base.

12.2 Third party evaluation will also be conducted after one year of the programme in a sample size of 10% of the districts covered under the sub scheme, the term of references shall include: a) Number of female calves born; b) mortality rate among calves and c) number of female calves born.

12.3 Impact analysis will be undertaken centrally as per TOR approved by this Department.

Annexure-A


ORGANOGRAM
Extension of AI coverage in aspirational districts
Project Head Quarter
DAHDF
CMUs
SOPs
MSP
State Government
Monitoring of the programme
Procurement of semen doses as prescribed under the sub scheme
State Implementing Agency (SIA)
Formulation of action plan
Utilize funds available under RGM
Channelize funds to EIAs
State level review committee
Submission of UC/Annual report/audit report through State Government
END IMPLEMENTING AGENCIES
DAH
NGOs
State Livestock Development Board
Milk Fed