

Terms of Reference (TOR)

For

**In-depth Monitoring
of**

**“Artificial Insemination (AI) Activities Extension and Embryo Transfer
Technology Implementation Project (3rd Phase)”**



**Monitoring & Evaluation Sector-6
(Education and Social Sector)
Implementation Monitoring and Evaluation Division
Ministry of Planning**

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**Terms of Reference (TOR)
for
In-depth Study**

1.	Name of the Project	:	"Artificial Insemination (AI) Activities Extension and Embryo Transfer Technology Implementation Project (3 rd Phase)"
2.	Sponsoring Ministry/ Division	:	Ministry of Fisheries and Livestock (MoFL)
3.	Executing Agency	:	Department of Livestock (DLS)
4.	Location of the Project	:	64 Districts

5.	Estimated Cost	:	(In Lakh Taka)
a)	Total	:	Tk. 26543.09
b)	GOB	:	Tk. 26543.09
c)	Project Aid	:	--

6.	Implementation Period	Date of Commencement	Date of Completion
a)	Original	01.01.2016	31.12.2020

7. Background of the Project:

Cattle are the main economic livestock throughout the world. Livestock is playing an important role as a means of livelihood. In most developing countries, often the number of livestock is quite high but food from animal origin remains deficit. For example, Bangladesh possesses more than 25 million cattle and buffaloes but the country imports over 56% of the total amount of milk and equivalents consumed from elsewhere. Nevertheless, milk consumption in Bangladesh is one of the lowest even in the south Asian region. In most tropical countries, the growth in the dairy industry remained modest over the decades. The limited growth in dairy industry is certainly due to poor genetics of the cattle. Artificial insemination (AI) has been practiced as a potent breeding tool to improve genetics of adopted indigenous cattle in the tropics since late 1950s.

Over the last 50 years, a substantial change has been made in improving local cattle genetics by inseminating zebu cows with imported bull's semen of European breeds. Currently, about 116 million cows and heifers are available in Bangladesh. With the breeding bulls available at present less than 50% of the cows and heifers can be artificially inseminated. This means that currently still more than 50% cows are not inseminated; implicating that genetic improvement is very slow for this population. Therefore, expansion of the AI program is the only way for genetic improvement of cattle in Bangladesh.

Presently, the number of semen production under the government facility is around 3.4 million per year. The developmental projects (AIET, phase-1 & phase-2) have played a significant role for this extraordinary success. To cope up with the increasing demand of AI having semen of improved genetic merit, the number of semen production should increase at least 7.0 million in the coming days. Consequently, the capacity building for increased semen production should be doubled. Similarly, to reduce the problems associated with inbreeding, modern AI data recording and semen distribution system should also be incorporated. Therefore, it is of the utmost

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importance to take AI & ET project (Phase 3) in order to continue genetic improvement of native cattle.

8. Objectives of the Project:

- i) To extend modern AI activities up to the farmers' doorstep by establishing union AI points.
- ii) To increase semen production in order to cope up with increased demand.
- iii) To improve genetic merits of the non-descriptive native cattle in Bangladesh.
- iv) To ensure people's nutrition security by increasing milk and meat production.
- v) to demonstrate total mixed ration (TMR) to farmers for achievement of maximum performance of cattle in Bangladesh.
- vi) To take part in poverty reduction through manpower development and creating self-employment opportunity.
- vii) To adapt bovine multiple ovulation & embryo transfer (MOET) in Laboratory at CCBDF.

9. Main Components of the Project:

- Training AI Technicians- 1000 man.
- Training for farmers- 38960 man
- Demonstration Total Mixed Ration (TMR)- 8000 man
- Liquid Nitrogen Purchase- 20.00 lac litre
- Sexed Semen Purchase- 5000 bag
- Vehicle purchase- 53 nos.
- Equipment purchase- 48 items
- Land acquisition for Breeding Bull Calf Rearing unit in Khulna & Rangpur- 10 Acre
- Land Development Khulna, Rangpur, Chattagram, Faridpur, Sylhet, Bogra, Barisal
- Construction of Bull Station in Chattagram & Faridpur- 2 units
- Construction of Rearing Unit cum Minilab in Sylhet, Bogra, Barisal, Khulna & Rangpur- 5 units
- Construction Total Mixed Ration (TMR)- 1 unit
- Construction of Union AI sheds- 1000 nos.
- Other auxiliary component as per DPP

10. Objectives of the In-depth Monitoring:

- 1) To review & present project related information (Background, Objectives, Status of project Approval/Revision, mode of financing & other relevant issues etc.)
- 2) To collect, review, analyze and present with graphical / tabular form of data in regards to overall progress & component wise implementation progress (physical and financial) of the project;
- 3) To observe, analyze and review of any specified problems (if any) in implementing the project activities (already completed/ongoing);
- 4) To examine whether the provisions of PPA 2006 and PPR 2008 were followed properly in the procurement process (Invitation of tender, evaluation of tender, approval procedures, contract awards etc) of the packages (goods, works and services) & to analyze these procurement related functions based on predetermined indicators.
- 5) To collect the information of the goods supplied from previous 2nd phase project.

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- 6) To examine and review the status of goods/works/services procured and its proper maintenance with necessary/appropriate manpower & other related issues under the project;
- 7) To review the A. I. Technician training, farmers training, foreign training/study tour, A.I. materials supply, duty of A. I. Technician in the field & regular monitoring system by interviewing the beneficiary;
- 8) To crosscheck the procured and reserved liquid nitrogen, sexed semen and supply the materials in field level;
- 9) To collect the purchased & its utilized information of vehicle, machineries & equipments, office equipments of this project;
- 10) To suggest regarding the sustainability Union A. I. system after ending the project;
- 11) To analyze the log frame of the project in details emphasizing its various aspects;
- 12) To review the progress of Artificial Insemination and conduct survey over the Beneficiaries/Stakeholders of the Project.
- 13) To investigate the strength, weakness, opportunities & threats (SWOT) of the Project, assess the service delivery /approach of the field officer to the project;
- 14) To recommend on the basis of the in-depth findings for smooth implementation of the projects;
- 15) To analyse, assess data and information regarding ADP/RADP allocation, fund release, expenditure and bill payment etc. of the project.
- 16) To review and opine for sustaining the benefits of the project reviewing exit plan.
- 17) To accomplish other relevant/related tasks assigned by the Authority within the contract period;

11. Professionals required for the evaluation works:

No.	Type of professionals	Educational qualification	Experience required
1.	Consulting Firm	-	At least 1 (one) year working experience in relevant field.
2.	Professionals of Consulting Firm:		
a)	Team Leader	MS in Theriogenology/ Veterinary Science. Higher Degree in relevant field will be given preference.	<ul style="list-style-type: none"> At least 10 (ten) years' working experience in relevant field. Experience in at least 1 (one) Monitoring and Evaluation study as Team Leader. Experiences in procurement related activities. More experiences will be given preference.
b)	Mid-Level Engineer	B.Sc. in civil Engineering from any recognized University.	<ul style="list-style-type: none"> At least 5 (five) years' working experience in relevant field. At least 3 (three) years' working experience in Monitoring and Evaluation.
c)	Socio-Economist	At least Master Degree in any discipline of Social Science Faculty from any recognized University.	<ul style="list-style-type: none"> At least 5 (five) years' working experience in relevant field. At least 3 (three) years' working experience in Monitoring and Evaluation.
d)	Statistician	At least Master Degree in Statistics from any recognized University.	At least 5 years' working experience in conducting research/ survey, data management activities & analysis.

12. **List of reports, Schedule of Deliveries, Period of Performance:**

No.	List of reports & no.	Schedule of Deliveries
1.	Inception report (Technical 20+Steering 20) Copies	Within 15 Days from the date of contract Signing
2.	1 st Draft report (Technical 20+Steering 20) Copies	Within 60 Days from the date of contract Signing
3.	2 nd Draft report (Technical 20+Steering 20) Copies & (in Workshop 130 Copies)	Within 90 Days from the date of contract Signing
4.	Final report (Bangla 40+English 20) Copies	Within 120 Days from the date of contract signing

- All reports will be submitted to the Director General, Monitoring and Evaluation Sector-6 (Education and Social), IMED. Font of Reports should be Unicode Based Font. Printing cost will be borne by the consulting firm as per budget.

13. **Data, Personnel, Facilities and Local Services to be Provided by the Client:**

The client will provide the following project related documents; if available;

- Project DPP/RDPP;
- Manual of Animal production, animal diseases and other documents;
- Provide necessary assistance for the communication with different stakeholders.

Nasima
03/10/2018
Nasima Mohsin
Director General
(Joint Secretary)
Implementation Monitoring & Evaluation Division
Ministry of Planning
Government of the People's Republic of Bangladesh