

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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