Framework Convention on
Climate Change

Impact of "Harit Dhara" – anti-methanogenic feed supplement on productive performance of bovines

1. *Submitting organization:*
   BAIF Development Research Foundation (3)

2. *Short description of the study:*
   Considering the burning issue of global warming through GHG emission from livestock sector, it is essential to adopt feeding of anti-methanogenic feed supplement like “Harit Dhara” which will minimize the methane emissions to the extent of 20% through enteric fermentation. Indian Council of Agricultural Research (ICAR) has developed an anti-methanogenic feed supplement "Harit Dhara" which has been made from tannin-rich plant-based sources. Tropical plants containing tannins, bitter and astringent chemical compounds, are known to suppress or remove protozoa from the rumen. It has been licensed to BAIF for production and promotion among livestock keepers. This supplement helps in reducing methane emission and improving the productivity of dairy animals.

   Based on this, “Harit Dhara” was supplied to Andhra Pradesh state in BAIF’s programme and fed to animals. Totally, 90 beneficiaries were selected and supplied “Harit Dhara” for feeding 90 lactating cows for the duration of four months. Data related to productive performance including daily milk yield and milk fat content was recorded and analyzed.

3. *Geographical Region:*
   Two districts including Palnadu and Prakasam Districts of Andhra Pradesh state covering 23 villages.

4. *Area of climate policy:*
   Anti-methanogenic feed supplement feeding to reduce enteric methane emission;

5. *Short description of the policy(ies):*
   Global warming is a burning issue in the world which is affecting the overall eco- system. Global warming caused by the increase in the concentration of greenhouse gases (GHGs) in the atmosphere, has emerged as one of the most prominent global environmental issues. India has a major role to play in reducing global emissions and determining the future climate. Mitigation options for enteric methane falls into three general categories as improved feeding practices, use of specific agent and feed additives, changes in animal management and breeding. As an intervention to reduce enteric methane emission, BAIF has introduced “Harit Dhara” – anti-methanogenic feed supplement to livestock which will reduce enteric methane emission to the extent of 20%. BAIF has received a license from ICAR to produce this feed supplement.

6. *Work programme Area to be covered by the Study:*

Assessment and analysis of the impacts of the implementation of response measures (with a view to understanding the positive and negative impacts);

7. ***If the case study will cover assessment and analysis of the impacts of the implementation of response measures, the impacts to be studied:***
   Economic; Environmental;

8. ***If the case study will cover assessment and analysis of the impacts of the implementation of response measures, the type of assessment (Qualitative/Quantitative/Both):***
   Both

9. ***If the case study will cover assessment and analysis of the impacts of the implementation of response measures, the methodology or tool used for impact assessment:***
   Daily recording of milk yield and milk fat content.

10. ***Status of proposed case study:***
    Case study is completed but not published

11. ***If the case study is completed and published, link to the case study:***
    Not applicable.

12. ***Elaboration on how the submitter would contribute to the development of the case study:***
    Efforts will be towards publishing the case study in collaboration with KCI.