

[Cameroon]

Summary of relevant activities, future priorities and capability needs.

1. Cameroon - Livestock Development Project (PRODEL)

The main objective is to Boost Livestock Sector for Improved Productivity and Climate Change Resilience. The development objectives of Livestock Development Project are to improve productivity of selected livestock production systems and the commercialization of their products for the targeted beneficiaries under the targeted project areas, and to provide immediate and effective response in the event of an Eligible Crisis or Emergency. This project had four components.

2. Data collection and analysis for the development of a Cameroon National Strategy for Climate-smart Livestock under the Program for Climate-smart Livestock Systems (PCSL) (P167998)

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2. Data collection and analysis for the development of a Cameroon National Strategy for Climate-smart Livestock under the Program for Climate-smart Livestock Systems (PCSL) (P167998)

Objective: Undertake a survey on data collection and analysis to inform the development of a Cameroon National Strategy for Climate-smart Livestock in collaboration with MINEPIA and the World Bank, under the Program for Climate-smart Livestock Systems (PCSL) (P167998).

Scope of work:

The scope of work comprises the following main activities:

1. Development of an approach for farm selection, survey piloting and capacity building, and survey implementation.
2. Training of survey implementers to build capacity to collect data related to climate-smart livestock systems.
3. Data-gathering, entry, cleaning and quality control in collaboration with MINEPIA.
4. Collaboration with MINEPIA and the World Bank on the development of a Cameroon National Strategy for Climate-smart Livestock.
5. Technical review and inputs to a final technical report for PCSL.
6. I share your opinion on this, however as we progress should need be or we will correct accordingly if not then these points hold.

Relevant activities

The first component: Improvement of livestock services access and delivery,

Aims: to improve access to key livestock services for livestock producers, especially animal health services, improved genetic material and high-quality inputs. It has the following subcomponents: (i) Access to Animal health services; (ii) Access to high quality inputs; (iii) Institutional support, capacity building and communication; and (iv) Contingency emergency response.

The second component: Improvement of pastoral productivity, access to markets, and resilience of pastoral communities,

Aims: to increase the contribution of pastoral areas to the domestic supply of meat (especially for urban markets) while upgrading livestock production systems (cattle, small ruminants, poultry) for poor and conflict-affected communities. It has the following subcomponents: (i) Support to animal production practices and the community based management of pastoral areas; (ii) Support to commercialization and marketing of pastoral livestock products; and (iii) Improving the resilience of poor and conflict-affected communities.

The third subcomponent: Support to livestock value chains development, will support development of pig, poultry, beef, goat, sheep, milk and honey production and value chains in target areas for a broader engagement of local entrepreneurs in the sector. It has the following subcomponents: (i) Establishment of Productive Partnership; and (ii) Financing of Sub-Projects for Producer Organizations.

The fourth component: Project coordination: will support implementation of the first three components, inform the project execution and performance, while supporting studies that are essential to the project.

Future priorities

1. Develop livestock technologies that minimize GHG emissions and at the same time improve production and productivity.
2. Encourage and Improve Practices and technologies that are strategic in supplementary feeding, improving the diet quality, adequate animal health control and improvement of livestock genetics.
3. Developing feeding strategy for dairy animals with minimum enteric methane production and increased milk production
4. Screen feeds for small ruminants that yield lower CH₄ production at the same time improving productivity
5. Modernize manure management in poultry species like Brahma, Turkey and Layers
6. Build capacity of researchers on the measurements/ recording of GHG emissions from different livestock species.

Justification of the above listed future priorities: It is a fact that agriculture is responsible for approximately 10- 12% of global anthropogenic GHG and livestock contributes nearly 80% of a total agricultural GHG emission. The GHG emissions from livestock are directly from enteric fermentation and manure, and indirectly from feed production, feed processing and conversion of forests to pasture lands. The major GHGs in the livestock sector are direct emissions which are methane (CH₄) and nitrous oxide (N₂O). For the developing countries like Cameroon methane is more important due to larger cattle population and inferior feed quality. By 2035 the total CH₄ emission from ruminant livestock is expected to increase significantly due to the growing demand of milk and meat. Therefore, it is of utmost importance to mitigate CH₄ emission from the livestock sector in the country as well as in the region.

Capability needs

1. **Pasture Specialist (Agrostology),**
2. **Animal breeders (Cattle, Sheep, Goat),**
3. **Dairy technologists,**
4. **Animal Health scientists**
5. **Forage crop agronomists and**
6. **Production system specialists**
7. **Manipulation of GHG measurement equipment like Greenfeed.**

Justification of the above listed Capability needs:

- ❖ The majority of livestock in Cameroon are reared under smallholder crop-livestock mixed farming system and livestock are mainly dependent on poor roughage feeds with higher fiber content. Consequently, feeding lower quality feeds to our animals increases the methane production as the quality of feeds and methane production are inversely related. Thus, my research intention is how to improve the feeding quality of the roughage feeds such as Gwathamala, Elephant grass, straw, grass hay and equally introduce less fibrous and nutritionally rich species,
- ❖ To achieve these needs, my intention is to improve forage quality as well as change the proportion of diet; manipulate feeds by supplementing feed additives that either directly inhibits methanogens or alter the metabolic pathways leading to a reduction of substrate for methanogenesis.
- ❖ In overall, my responsibilities in these Capability needs are writing project proposals, feeding animals, preparation of samples, data collection, data management, data analysis and scientific report writing.