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TECHNICAL SUPPORT TO SET UP A CENTRAL DATABASE FOR LIVESTOCK TO RENDER THE SECTOR CLIMATE RESILIENT AND ENHANCE ANIMAL PRODUCTION IN THE REPUBLIC OF MAURITIUS

August 2024

SDGs:



Country: Republic of Mauritius

Project Code: TCP/MAR/3802

FAO Contribution: USD 300 000

Duration: 1 September 2021–31 December 2023

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Implementing Partners

The Ministry of Agro-Industry and Food Security (MAIFS).
Animal Production Division.

Beneficiaries

Small and medium-sized farmers, livestock producers, agricultural workers, government agencies, and local communities.

Country Programming Framework (CPF) Outputs

CPF Priority 1: Promotion of more sustainable and environment-friendly practices and use of adaptation/mitigation measures in the context of climate change for enhanced resilience for farming and food security/safety.



BACKGROUND

The livestock sector in the Republic of Mauritius is currently facing several significant challenges that could severely impact its sustainability and growth if not addressed promptly. One of the most pressing issues is the lack of effective monitoring of livestock health and productivity, which is crucial for ensuring the sector's viability. The current system for identifying and tracing livestock is outdated, relying on conventional tagging methods that have proven insufficient for maintaining accurate and timely records. This shortage has delayed the Ministry's ability to efficiently allocate resources and provide adequate support to farmers, causing in stagnation within the sector.

The existing animal register system has shown its limitations, particularly during the recent outbreak of Foot and Mouth Disease (FMD) in Mauritius. The inability to trace and monitor livestock in real-time contributed to the rapid spread of the disease, causing significant economic losses and demoralizing farmers, especially those with limited resources. Moreover, the lack of continuous monitoring has prevented small-scale farmers from accessing new market opportunities, such as those in the tourism industry, exports, and value-added activities, which are currently prioritized by the government.

In response to these challenges, the support of the FAO has been requested to implement a series of measures aimed at revitalizing the livestock sector. The FAO's assistance focused on building capacity, creating, and updating a comprehensive livestock database, and establishing a modern system within the Animal Production Division that supports informed decision-making. Additionally, the FAO will work to raise awareness among farmers about the new system, encouraging their participation through a combination of incentives, disincentives, and legislative measures. The organization will also provide recommendations on the necessary legislative and policy frameworks to ensure the long-term sustainability of the system and the support being provided.

IMPACT

The project is expected to significantly improve the services provided to farmers by modernizing livestock identification and traceability systems, leading to better health monitoring, disease prevention, and resource management. This will empower farmers, particularly smallholders, to make informed decisions, access new markets, and participate more fully in the agri-food system. By creating a more inclusive and resilient agricultural sector, the project will open economic opportunities, increase productivity, and contribute to poverty alleviation, thereby fostering a more equitable and sustainable agri-food system in Mauritius.

ACHIEVEMENT OF RESULTS

The establishment of animal identification and traceability systems plays a significant role in contributing to several SDGs. Specifically, SDG 3 (Good Health and Well-being) benefits from the National Livestock Identification System (NLIS), which enables the prompt identification of animal diseases, allowing for swift response actions. Also, SDG 12 (Responsible Consumption and Production) is supported by the NLIS, as it facilitates the traceability of products of animal origin, thereby aiding in the identification of the source of any issues that may arise within the production chain. While the primary objective of the project—to establish an animal identification and traceability system—has been achieved, the project has unfortunately encountered significant delays in its implementation.

IMPLEMENTATION OF WORK PLAN AND BUDGET

The recruitment of consultants has proven to be a very time-consuming process. The first recruitment cycle took an entire year to complete, and concerns have arisen regarding the quality of the consultants selected.



Additionally, the procurement process has been burdensome and lengthy. Some approvals also caused significant delays, adversely impacting the project's progress. Despite these challenges, most activities remained within budget. The project's primary issues were internal, relating to administration, procurement, and human resources, with no environmental or social risks identified.

FOLLOW-UP FOR GOVERNMENT ATTENTION

To ensure the project's long-term success, the government must focus on continuous monitoring and evaluation of the new livestock identification system, investing in necessary infrastructure and technology. Enacting and enforcing legislation to mandate livestock registration and traceability is crucial for inclusivity. Building partnerships with stakeholders like farmers' associations, private sector entities, and the FAO will help sustain the system's benefits. Additionally, the government should provide incentives, such as subsidies and technical assistance, to encourage farmer participation and conduct ongoing awareness campaigns to educate farmers about the system's advantages.

SUSTAINABILITY

1. Capacity development

The Ministry is finalizing the Animal Health, Veterinary Public Health, and Livestock Production Bill. This project is managed by the Animal Production Division within the MAIFS. The system being developed will connect all institutions operating within the livestock sector, including the Animal Production Division, the Department of Veterinary Services (DVS), the Small Farmers Welfare Fund (SFWF), the Food and Agricultural Research and Extension Institute (FAREI), and the Mauritius Meat Authority (MMA). After its implementation, the system will be maintained through a one-year warranty period, followed by a maintenance agreement under the supervision of FAO Georgia.



2. Environmental sustainability

To support environmental sustainability the project reduced the environmental impact by minimizing the paper-based operations.

3. Technological sustainability

The software currently under development will be further adapted for farmers through the creation of a mobile app. The project has introduced new processes for animal identification and traceability. Additional capacity building, including training and awareness programs, is necessary.



DOCUMENTS AND OUTREACH PRODUCTS

- ❑ *National Livestock Information System. (2023). Procedure manual for the National Livestock Information System.*



ACHIEVEMENT OF RESULTS - LOGICAL FRAMEWORK

Expected Impact	Improved suitable services provided to farmers for an inclusive agri-food system		
Outcome	A livestock information system to support the decision making process is set up and operationalized		
	Indicator	A central database for livestock established.	
	Baseline	0	
	End Target	1	
Comments and follow-up action to be taken	<p>The main activities of the project, including the development of the software, procedure manuals, and policy framework, have been successfully completed. Moving forward, further actions related to the software include the following:</p> <ul style="list-style-type: none"> - Developing a mobile app that will enable farmers to report animal movements, such as births, deaths, and sales. - Amending the animal health book to ensure it aligns with the new software. - Adding a module dedicated to animal welfare to enhance the overall functionality and impact of the software. 		
Output 1			
Capacity building to implement and operate a modern database for the Animal Production Division strengthened			
Indicators		Target	Achieved
Number of technical officers participated on the training.		25	Partially
Baseline	0		
Comments	The database has been set up and is now operational. Officers have been trained in its use. However, further training is required for external stakeholders, such as FAREI, SFWF, and MMA, to implement the system within their respective organizations.		
Activity 1.1			
Develop and validate traceability system for pigs, poultry and deer as well as for imported livestock			
Achieved	Yes		
Comments	An international consultant was recruited in October 2022. However, the consultant's report did not facilitate the development of traceability systems. As a result, the APD developed the traceability systems in-house, with assistance from local consultants.		
Activity 1.2			
Develop SOPs and reference manuals			
Achieved	Yes		
Comments	Local consultants were recruited in May 2023, and their final reports were approved by the NPC in December 2023. The procedure manual has been designed and submitted for printing.		
Activity 1.3			
The NAIS Unit is Operationalized			
Achieved	Partially		
Comments	<p>The operationalization of the NLIS office included the following steps:</p> <ul style="list-style-type: none"> - Institutional setting: The institutional framework was established for Mauritius, but not yet for Rodrigues. - Staff recruitment: Appropriate staff were identified and recruited for the Mauritius office. However, the staffing levels are currently inadequate. Recruitment for Rodrigues is still pending. - Equipment acquisition: Five laptops were procured for the Mauritius office. However, desktops could not be acquired due to procurement-related issues. No IT equipment was obtained for Rodrigues because of a delayed mission to the island. Tablets were not purchased due to budget constraints. Videoconferencing equipment was successfully acquired in November 2023. - Office refurbishment: The refurbishment of the APD offices has not been completed, pending approval. 		
Activity 1.4			
Develop central database and Documentation Centre			
Achieved	Yes		
Comments	<p>Following consultations with colleagues at the FAO, it was discovered that a generic software solution is already available and being implemented in many countries worldwide. An international consultant was recruited by FAO Georgia, and a key component of his assignment is to assist the local team in customizing the software.</p> <p>A tender for software development services was initially launched with a closing date of 7 May 2023; however, the procurement process was unsuccessful. A second tender was subsequently issued with a closing date of 15 May 2023. User Acceptance Testing (UAT) and initial data entries were conducted in December 2023, and this process is expected to continue in the coming months. The warranty period for the software begins on 1 January 2024.</p>		

Activity 1.5	Validation of the Central Database and related manuals		
	Achieved	Yes	
	Comments	A validation workshop was conducted on 19 December 2023.	
Activity 1.6	Training of institutional users is undertaken		
	Achieved	Yes	
	Comments	Twelve users of the system, including those from APD and DVS, have been trained. Additional training sessions are planned for other stakeholders, such as FAREI, SFWF, and MMA.	
Output 2	A system of incentives and disincentives and communication campaign is put in place to encourage farmers to register		
	Indicators	Target	Achieved
	Number of farmers registered in the system.	2 500	Partially
Baseline	0		
Comments	A major impediment is obtaining accurate information and documents from farmers to facilitate their registration.		
Activity 2.1	Current incentive package for the livestock sector is reviewed		
	Achieved	Partially	
	Comments	Several schemes, such as the Heifer Productivity Incentive Scheme and the Calf Productivity Incentive Scheme, have already been amended to require farmers to be registered with the NLIS. An amendment to the Feed Subsidy Scheme is currently underway.	
Activity 2.2	Communication campaign objectives devised		
	Achieved	No	
	Comments	A software needs to be ready to launch a communication campaign.	
Activity 2.3	Communication Plan designed		
	Achieved	No	
	Comments	Unfortunately, due to the initial delay in recruiting the consultant, the project experienced significant setbacks. As a result, the communication plan could not be completed within the project's timeline and should be considered for inclusion in another TCP.	
Activity 2.4	Materials for Communication campaign prepared		
	Achieved	No	
	Comments	Aligned with the previously stated information.	
Activity 2.5	Communication campaign implemented		
	Achieved	No	
	Comments	Aligned with the previously stated information.	
Activity 2.6	Monitoring and Evaluation of campaign		
	Achieved	No	
	Comments	Aligned with the previously stated information.	
Output 3	The relevant institutional, legislative and policy frameworks are defined to ensure the sustainability of the support being requested and the system being requested to be put in place		
	Indicators	Target	Achieved
	Legislative and policy framework designed.	1	Partially
Baseline	0		
Comments	The Animal Health, Veterinary Public Health, and Livestock Production Bill is currently being finalized.		
Activity 3.1	Institutional and Policy framework for the National Animal Identification is devised		
	Achieved	Yes	
	Comments	A local consultant has been appointed in May 2023. The working sessions are planned with him for the drafting of the policy framework.	
Activity 3.2	Policy framework is approved		
	Achieved	No	
	Comments	Cabinet approval for the policy framework is being sought and is expected to be obtained by September 2024.	
Activity 3.3	Regulations are drafted		
	Achieved	No	
	Comments	This activity could not be completed within the available time.	

Partnerships and Outreach

For more information, please contact: Reporting@fao.org

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