

PROJECT SUMMARY

Ref No.: MRIC/IBG3-BG-P09	Title: Food For Thought
Local Institution: Terra Core Ltd	
Project Leader	
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TECHNICAL ABSTRACT The proposed project aims to employ constructed wetlands as a soil conservation practice to mitigate the impacts of climate change on agriculture in Mauritius and enhance food security. The main goal of the project will be to create a production system that will increase the resilience of agriculture to the impact of climate change and protect its ecosystem from environmental degradation through nature-based adaptation methods to increase food security. This will be achieved through the construction of a surface flow constructed wetland for stormwater management and treatment. Such a system will be able to recover quickly from the increasingly erratic rainfall patterns and torrential rains by redirecting excess water into an artificial wetland through tile drains which reduces surface runoff and erosion losses, preventing land degradation. The artificial wetland will also make use of the natural function of its ecosystem to treat drained water from the agricultural system, effectively reducing nutrient concentration levels before exiting into streams and marine ecosystems. In addition to removing excess water, these drains also allow the height of water table to be controlled and provide a means to address the issues of saltwater intrusion that the coastal regions of the country are facing as well as the deepening water crisis.	
Key Words: Constructed Wetland, Free Water Surface Flow, Nature Based Solution, Soil Conservation, Climate Change Adaptation, Food Security	