

Climate-resilient agricultural production systems are determined by healthy soils, secure and sustainable water supplies, diverse farming systems, and adaptive communities.

To develop climate resilient environment, which acts to ensure that Tonga's key natural resources are preserved, Programme I focuses on building knowledge of the underlying environmental conditions.

Programme 1

Tonga Agriculture Sector Plan (TASP) Programme 1



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The three specific objectives are to: (i) develop baseline knowledge for sustainable management of soil and water (for agriculture); (ii) develop climate resilient guidelines and indicators for diverse farming systems; and (iii) build capacity for climate resilient agriculture (diverse farming systems and adaptive communities - to impact on Programme 3).

Accordingly, Programme 1 has three Sub-Programmes: (i) Healthy Soils and Sustainable Water; (ii) Climate Resilient Guidelines and Indicators; and (iii) Capacity for Climate Resilient Agriculture, which are outlined below.

Programme 1: Climate Resilient Environment Sub-Programme 1: Healthy Soils and Sustainable Water Healthy soils Refurbish and Operate MAFFF's Soils Laboratory **Conduct National Soil Survey and Update National Soil Maps** Promotion/Awareness Raising of Soil Fertility Issues District-Level On-Farm Fertilizer Trials and On-Going Monitoring of Soil Fertility Feasibility Study on Application/Use of Vermiculture and Trial Sustainable water **Quantifying Existing Groundwater Resources Estimating Current Exploitation of Groundwater Resources Determining Groundwater Resources Locations Available for Greater Use; and Fragile** Locations for Protection and/or Rehabilitation **Pollution Risks to Groundwater Estimating Future Climate Change Impacts and Water Demands Community Engagement on Future Water Use for Agriculture Sub-Programme 2: Building Agricultural Resilience to Climate Change** Development, implementation and monitoring of climate resilient guidelines and indicators to provide the national level context for the development of climate resilient agriculture **Sub-Programme 3: Building Agriculture Resilience to the Impact of Climate Change** 3-day capacity building participatory workshops on climate resilience and climate resilient agriculture focused on a wide range of people who will be engaging with rural communities, either directly or indirectly. Feasibility study to value "whole of island approach to resilient agriculture production

Budget for Programme I is T\$4.05 million or 10% of TASP budget.

