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HEADS OF AGRICULTURE AND FORESTRY SERVICES (HOAFS)
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EXCELLENCE IN ATOLL AGRICULTURE

Brief Concept Note

(Paper prepared by the Secretariat)

1. Programme/ Project Summary	
Programme/ Project title:	Excellence in Atoll Agriculture (EAA)
Beneficiaries:	Atoll Countries: Kiribati, Tuvalu, Marshall Islands, Nauru, Tokelau, Niue High Islands with Atoll Communities: FSM, Palau, PNG, Solomon Islands, New Caledonia, Cook Islands, French Polynesia and Tonga
2. Context <p>Atoll farming systems are highly vulnerable to climate change and natural disasters threatening livelihoods and food and nutrition security of atoll communities. Sea level rise is already threatening the atoll farming systems through salt water inundation into farmlands causing damage to crops, contamination of ground water sources and coastal erosion. The recent drought in Marshall Islands has demonstrated the vulnerability of the farming systems to natural disasters which had caused widespread impact on major staples.</p> <p>These challenges are compounded by non-climatic factors including, limited availability of essential soil nutrients, limited water availability, limited arable lands, narrow genetic base (crops and animals), and increasing incidence of crop and livestock pests and diseases (SPC/ACIAR Project report, 2015). These factors, in turn, contributes to heavy reliance on imported food which are often in low diversity and have deleterious effects on food insecurity and NCD problems on the atoll populations. In addition, a range of other socio-economic factors come into play including, limited income opportunities; population pressures on natural resources and youth unemployment; outdated policies and regulatory frameworks; poor institutional and human capacities; and; limited absorptive capacity and linkages amongst programmes.</p> <p>These challenges is prompting greater focus on building resilient agriculture and food systems for sustainable livelihoods and food and nutrition security of atoll communities. The SPC Excellence in Atoll Agriculture programme aims at providing a focal point for integrated approach to addressing the multi-faceted challenges facing the atoll communities through joint planning, implementation and scaling of lessons through effective partnership and linkages. Key strategic priorities will involve capacity development and institutional strengthening, targeted atoll agriculture research and development agenda, livelihoods support and climate change adaption.</p>	

The programme supports the vision of the Pacific Heads of Agriculture and Forestry Services (HOAFS) and the Ministers of Agriculture and Forestry (MOAF) who, in 2010, recommended the establishment of an atoll centre of excellence in Kiribati to model solutions to agricultural challenges faced by the atoll countries. The programme is also in line with SPC's Strategic Plan: Objective 1 through development and promotion of technologies and sustainable practices geared toward atoll specific needs for resilience, livelihoods, food and nutrition security; Objective 5 through promotion of integrated approach for the development of climate smart technologies, crop varieties and improved livestock types/breeds suitable for atoll conditions; Objective 7 through establishment of multi-stakeholder platforms to serve as the entry point for research, training and policy support on atoll agriculture production and marketing of locally produced foods.

3. Theory of Change

GOAL: *The eventual impact of the programme is: **Resilient food systems and healthy ecosystems for food and nutrition secure atoll communities***

Outcome 1. Resilient atoll farming systems: *The programme will effect resilient farming systems in atolls through the development, promotion and utilisation of innovations and technologies for atoll conditions including evaluation and promotion of climate smart technologies and practices on soil health, integrated pests and disease management, water use efficiency, new climate smart nutritional varieties, hardy breeds and integration the new technologies into the atoll farming systems.*

Outcome 2. Atoll communities have access to more diverse, nutritious and health diet. *The programme will also focus on community mobilisation and engagement through community atoll agriculture demonstration sites in selected communities and creating awareness and market opportunities to increase availability and access and utilisation of diverse and nutritious food crops.*

Outcome 3. Capacity Development. *This will be enabled through documentation and development of targeted training packages, establishment of functional partnership platforms supported by policies mandating partnerships, robust ICKM systems in place. Technical trainings will be targeted to build knowledge and skills of stakeholders specifically on excellence in atoll.*

4. Readiness

Both the Heads of Agriculture and Forestry Services Meeting (HOAFS) and the Ministers of Agriculture and Forestry Meeting (MOAF) in 2010 recommended the establishment of Centre of Excellence for Atoll Agriculture. In addition, atoll countries have been advocating for specific atoll focused programmes to be developed to support the unique challenges. The programme will build on LRD's experience through the EU-funded SPC Development of Sustainable Agriculture Program (DSAP), IFAD funded Centre of Excellence in Kiribati and the ongoing SPC/ACIAR/FAO atoll soil health research programmes in the atoll countries. These programmes and projects have generated a range of results and that can contribute to operationalising the excellence in atoll agriculture programme. The ACIAR/SPC atoll soil health project currently being implemented in Kiribati and Tuvalu has developed a range of technologies for atolls including babai/pulak pit agroforestry rehabilitation and diversification using a terracing system consisting of range of indigenous atoll leafy vegetables, soil health management regimes and targeted compost recipes for atoll soil. Given the participatory nature of these initiatives means that human resources have been exposed and trained in the process to support scaling of these package of technologies and innovations.

5. Scope of Work & Management/ Implementation Arrangements

The programme will focus on the following:

Institutional Strengthening. The programme will focus on strengthening institutional capacities and linkages through the establishment of public private partnerships at national levels with representation from key stakeholders and with in-country development partners to coordinate programme development and implementation; strengthen enabling support mechanisms through the review and update agricultural related policies and regulations (biosecurity, pesticides, etc.); support knowledge management and information sharing amongst atoll countries. The influence of traditional structures on development will be also leveraged and mobilised closely. It will be recognised that often women are the key player in agriculture as well as keeper of the traditional knowledge. Enabling policies to support institutional strengthening will be targeted.

Atoll Agricultural Research. Centres for atoll participatory agriculture research will be established in selected communities for joint interventions to support generate technologies targeted for atoll challenges such as, soil and management technologies; adaptable crops to harsh atoll conditions; livestock husbandry practices; agroforestry systems and integrated pests and disease management.

Community Engagement and Empowerment. This will involve, mapping of existing land management and biodiversity, evaluation and documentation of existing traditional knowledge on atoll farming practices (including food preparations and preservation), improve access to resilient crop and animal varieties and breeds through participatory action research.

Capacity Building: SPC and other agencies as part of their development initiatives have placed great emphasis on capacity building of both agricultural field staff and farmers for atoll countries. Several training programmes relating to the major constraints to agricultural and forestry development have been conducted over the years. There have also been efforts to capture the lost technologies especially relating to food preparation and preservation. The programme will involve documenting of lessons and working with relevant institutions to develop and roll out a package of training programmes.

Livelihoods support. The programme will also aim to improve income generating opportunities through the development of local market opportunities and exploring potential inter-island value chain trade products and strengthen knowledge of traditional food preparations and preservations.

6. What evidence is there, that SPC is best positioned to do this?

The programme will count on LRD's past and ongoing projects and partnerships on atoll countries. These include, soil health improvement research in partnership with ACIAR/FAO, organic agriculture support for atolls in partnership with IFAD, the EU/SPC coconut improvement project and the IFAD funded centre of excellence for atoll agriculture in Tanea, Tarawa, Kiribati. The programme will also draw on expertise on and research design and analysis, genetics, pest and disease management, animal health and production, climate smart agriculture, soil health and water technologies, value chains and organic agriculture.

It will establish bridges with other relevant SPC Divisions/ Working Groups, including the NCD and Food Security on awareness and training; social development programme to mainstreaming youth and women in project activities; and; with the climate change division in mainstreaming

climate change information and weather forecasts in project activities and externally with the various technical networks housed in LRD including PPPO, PAPGREN, PIRAS, POETCom, and PHOVAPS will be engaged and mobilised through information and knowledge sharing on atoll research and development.

LONG-TERM GOAL

Improved climate change adaptation for sustainable livelihoods and food and nutrition security in atolls

Changes to be achieved, for whom, by the end of the programme that will help us reach our long term goal.

Evidence based research and practices translated into action and scaled through effective partnership platforms and KM systems

Improved nutritional quality and diversity of diets and livelihoods through more productive and sustainable agriculture and enhanced market chains

Improved governance and capacity for the management of research and development supported by conducive policies and legislations

Mid-term changes required to create the expected impact - changes in knowledge, skills, attitude or practice.

- Soil health improvement technologies
- Resilient and nutritious high value crops/seeds
- Animal husbandry practices
- Integrated pests and disease management
- Integrated research approaches

- Improved access to new technologies and knowledge
- Improved diversity of production systems
- New and diversified enterprise options
- Develop new market opportunities for atolls
- Sustainable atoll agriculture practices

- Policies and legislations supporting excellence in atoll agriculture research
- Improved governance and decision making process on research
- Improved coordination and partnership on atoll agriculture research supported by conducive policy environments

Activities to be delivered to achieve these changes.

- Integrated research priority setting
- Stock take on evidence based research practices
- Establish targeted research themes and clusters
- Development of appropriate research design
- Capacity building on research design

- Market demand/chain analysis
- Value chain analysis
- Community engagement and mobilisation
- Participatory research
- Capacity building of communities

- Policies and regulations development
- Partnerships mechanisms for EAAP
- South-South cooperation
- KM support
- Capacity and skills development

Which skills, processes, systems, relationships, networks, approaches and capabilities are needed?

SPC: scientific & technical capacity; experience in atoll agricultural research methodologies, research methodologies/tools, advocacy and brokerage skills; existing technical partnerships and networks, relationship building and resource mobilisation.

Member countries: ownership and interests, alignment to contexts and priorities, allocation of resources to programme, conducive policies for systematic approach, capacity development opportunities, effective engagement in SPC planning processes.

ASSUMPTIONS AND RISKS

Impact Assumptions

- Food security & climate change remain a priority for atolls
- Strong support from government
- Stakeholders able to take lessons to scale

Outcome Risks

- Low commitment and buy in from national governments
- Unavailability of technical staff in countries
- Low farmer and community commitment and participation

IMPACT ON INDIVIDUALS, POPULATIONS, INSTITUTIONS

IMMEDIATE TO MID-TERM CHANGES

OUTPUTS

CAPABILITIES