

Cook Islands: Summary of activities for outputs 1 and 3

Output 1: Impact analysis to strengthen national strategic planning
Output 3: Scale up resilient development measures in specific sectors



Refurbished clam aquaculture tanks at the Aitutaki Marine Research Station

Cook Islands timeline January 2019 – June 2023

Output 1: Impact analysis to strengthen national strategic planning	
June 2021	National consultant commences
September 2022	Testing of the full methodology on water security and marine resources management in Mangaia completed and Impact Snapshot published .
November 2023	A team from Cook Islands participated in the regional Applied Training in iA and the impacts database held in Fiji
May 2023	Light version of iA methodology applied to Mauke water project and training conducted with stakeholders in Rarotonga
June 2023	A team from Cook Islands participated in the sub-regional applied training for the light version of the impact analysis methodology
Output 3: Scale up resilient development measures in specific sectors	
Planning and coordination	
March 2019	Presentation of GCCA+ SUPA project at an Inception Meeting in Fiji attended by a representative from Palau
May 2019	Project sector selected - marine resources
August 2019	1st consultation with government agencies and NGOs
October 2019	Concept note approved
November 2019	2nd consultation to prepare the PDD
August 2020	PDD signed with provision for use of national procurement policy and procedures (following capacity assessments)
January 2021	National coordinator and technical officer commence
March 2021	PDD amendment 1 signed
June 2021	PDD amendment 2 signed
KRA 1: Upgrade of the AMRC to facilitate research, monitoring and education purposes on Aitutaki	
May 2021	Capacity needs assessment of the Aitutaki Marine Research Centre (AMRC) completed
July - September 2021	Conceptual plan for the refurbishment of the AMRC prepared
November 2021 – March 2022	Induction of a giant clam spawning event in Aitutaki and 68,000 juvenile clams released along Aitutaki lagoon ridge
April 2022	Standard Operating Procedures (SOP) for the spawning of giant clams at completed.
June 2022	Final design for AMRC completed
December 2022	Contract signed for refurbishment of AMRC and Clerk of Works hired to report on progress of work at the AMRC
June 2023	5-year operational plan for the AMRC incorporated into MMR Business Plan
June 2023	Refurbishment of the AMRC completed , including the upgrade of the seawater system and the upgrade of the land-based nursery. Practical Completion Certificate issued
June 2023	Marine monitoring equipment, laboratory equipment and IT electronics equipment delivered to MMR
KRA 2: Integrate climate awareness through traditional knowledge for the marine sector into environmental education programmes and management	

March 2022	Compilation and analysis of marine traditional knowledge and climate resilience information in Aitutaki, Aitu, Mangaia and Mauke completed and report prepared.
February 2023	Training and support to teachers to deliver an extra-curricular programme on climate resilience and marine traditional knowledge in Aitutaki, Mauke, Atiu, Mitiaro and Mangaia completed

Cook Islands highlights

The Cook Islands comprise 15 islands, with the high volcanic island of Rarotonga the centre of government and commerce. The Cook Islands are spread over 2 million square kilometres and situated northeast of New Zealand and between American Samoa and French Polynesia. Geographically and, to a certain extent culturally, the nation is divided into two groups: the Southern Group, comprising the islands of Aitutaki, Atiu, Mangaia, Mauke, Mitiaro, Rarotonga, Manuae (an uninhabited atoll) and Takutea (an uninhabited sand cay); and the Northern Group, comprising the islands of Manihiki, Palmerston, Penrhryn, Pukapuka, Suwarrow (atolls) and Nassau, which are relatively isolated and less developed. The population of Cook Islands is 17,434 (2016). Rarotonga is the main population centre. Key development challenges for Cook Islands include its narrow economic base, limited natural resources, fragile environment, shortage of skilled labour and relatively remote location.

The project used a consultative and people centred approach to (i) conduct an iA on past water security projects in water security and marine resources management in Mangaia and Mauke; and to upgrade the AMRC and integrate traditional knowledge into climate change education programmes for youth.

Highlights output 1

Cook Islands was one of the four countries to trial the extended version of the impact analysis methodology. This was carried out by a local consultant. The two past projects selected for analysis covered water security in Mangaia that was supported by the Pacific Climate Change Science and Adaptation Project (PACCSAP) and marine resource management in Mangaia that was supported by the UNDP/GEF Adaptation Fund.

The following are the output 1 highlights in Cook Islands.

- The main implementing partner for the iA was Korero o te Orau.
- The trial of the extended version of the impact analysis methodology was conducted over a 15-month period starting in July 2021 and included research into past projects, data collection and field trials of the methodology.
- The final snapshot impact analysis report was published in September 2022 and showed each project received a scoring of “high (positive) impact”, 2.6 out of a total of 4 for water security in Mangaia and 3.2 out of a total of 4 for marine resource management in Mangaia.
- Cook Islands featured in one of the Practice Learning Sessions conducted between June and August 2022 and shared the context and results of their activities in outputs 1 and 3.
- Cook Islands participated in the Regional applied training in impact analysis methodology and impacts database in Fiji in November 2022.
- A light version of the iA methodology was applied to the Mauke water project and training on iA was conducted with stakeholders in Rarotonga.
- Cook Islands participated in the Sub Regional Applied training for the light version of the iA methodology in Samoa in June 2023.

Highlights output 3

The Cook Islands Government selected the marine resources sector as their focus for Output 3. The overall objective of the project is to enhance climate change adaptation and resilience in the marine sector and the specific objective is to strengthen adaptive management of marine systems through strengthened, climate-focussed monitoring, education and awareness. The two key result areas are: (1) Upgrade of the AMRC to facilitate research, monitoring and education purposes on Aitutaki; and (2) Integrate climate awareness through traditional knowledge for the marine sector into environmental education programmes and management.

The following are the output 3 highlights in Cook Islands:

- The GCCA+SUPA project was presented to the countries at an Inception Meeting held in Fiji in March 2019. Following this and after two in-country consultations, Cook Islands selected marine resources management as their focus sector focusing on Aitutaki, Mauke, Atiu, Mitiaro and Mangaia in the Southern Group.
- The main implementing partners for the project were Climate Change Cook Islands and the Ministry of Marine Resources.
- The infrastructure of the AMRC was upgraded to support strengthened research, monitoring and education within a climate resilience context, targeting those marine systems that are most threatened by the on-going impacts of climate change.
- The land-based clam nursery and the seawater supply system at the AMRC were rebuilt and the centre was refurbished with new survey equipment, laboratory equipment and IT electronic equipment.
- Marine monitoring activities were conducted to revive the giant clam population in Aitutaki and in March 2022, 68,000 juvenile clams were released along the Aitutaki lagoon ridge.
- Standard Operating Procedures for the spawning of Giant Clams have been finalised.
- A 5-year operational plan for the AMRC was prepared and incorporated into the MMR Business Plan.
- Marine traditional knowledge, including fishing practices, has been compiled with the assistance of elders and fishers in the outer islands of Aitutaki Atiu, Mangaia, Mauke and Mitiaro. This has been shared with youth and communities and a report entitled “Improving the traditional fishing knowledge of the southern Cook Islands for the purpose of educating young people” has been completed.
- A teachers guide on “Fishing zones and associated fishing practices in the Southern Group” for primary and secondary school students has been prepared. Teachers in Aitutaki, Mangaia and Mauke have been trained in the delivery of this information.
- Outreach activities relating to the GCCA+ SUPA project and climate resilience in the marine sector have been conducted, including at school careers days and science expos.
- Two videos featuring youth in marine resources management have been prepared.

Cook Islands details: output 3

The PDD was signed in August 2020 following a consultative phase.

Assessment, consultation and design of measures

- Two consultations were conducted in the Cook Islands in 2019. The first consultation in August was for the GCCA+ SUPA team from SPC to present the GCCA+ SUPA project to government agencies and NGOs and the second in October 2019 was to design the activities for the PDD.

- During the first half of 2020, discussions took place between SPC and the Cook Islands Government about procurement procedures for the project's activities in Cook Islands. The PDD was signed in August 2020, with the provision for Cook Islands to use their own financial and procurement procedures, which was based on a capacity assessment. (The capacity assessment showed that Cook Islands was a National Implementing Entity to the Adaptation Fund and as an Accredited Entity to the Green Climate Fund).
- Further consultations between MMR, schools and tourism representatives in Aitutaki were conducted at the beginning of 2021.
- A National Coordinator, based in MMR, started on 1st January 2021 coordinating all GCCA+SUPA areas of work.

Further details on the KRAs are presented below.

KRA 1: Upgrade of the AMRC to facilitate research, monitoring and education purposes on Aitutaki

- A capacity needs assessment for the AMRC was prepared. This reviewed the key activities of the AMRC, assessed their operational capacity and recommended the structural renovations as the main priority for the GCCA+ SUPA project.
- Following this and in consultation with SPC-FAME advisors it was decided to focus on upgrading the land-based nursery and the seawater intake for the AMRC as well as other marine monitoring activities.
- The design of the AMRC upgrade was completed in mid-2022 and a contract was signed in December 2022. The upgrade work was completed in June 2023.
- A Clerk of Works was recruited to record the progress of the work and provide reports to MMR and the GCCA+ SUPA project team in Suva.
- A programme for expanded marine monitoring in Aitutaki has been prepared which includes coral health and water quality monitoring. This will help to track climate-driven impacts over time.
- To implement the expanded marine monitoring programme the necessary equipment was procured and delivered in the first half of 2023. This included SCUBA gear and underwater cameras; computers and projectors; and laboratory equipment (water quality kits and meters, microscopes and laboratory supplies).
- Following the preparation of the Aitutaki Lagoon Nursery Plan (Lagoonarium) the giant clam population in the Aitutaki Lagoon was enhanced with the release of 68,000 juvenile clams. Standard Operating Procedures for the spawning of giant clams has been finalised.
- A 5-year operational plan for the AMRC was developed to articulate costed activities for the AMRC, including technical capacity, and contribute to its long-term sustainability.
- A tourism plan to inform and engage visitors to the island and involve students, youth and other groups in marine educational activities at the AMRC has been prepared.

KRA 2: Integrate climate awareness through traditional knowledge for the marine sector into environmental education programmes and management

- The services of a Cook Islands NGO were procured in May 2021 to compile and analyse marine traditional knowledge and climate resilience in Aitutaki, Aitu, Mangaia, Mitiaro and Mauke. Thirty-eight fishers from these islands were interviewed and the fishing zones where traditional methods are used were mapped. The impacts of climate change to the sustainability of the marine resources were identified. A report entitled "Fishing zones and the associated fishing practices in the southern group" was prepared in April 2022. A Teachers Guide and a proposal to deliver this knowledge to teachers in the five islands were prepared.

- During the period May 2022 to February 2023, teachers in Aitutaki, Atiu, Mauke, Mitiaro and Mangaia were trained in the delivery of the climate resilience and traditional knowledge programme. This included field work and will be delivered as an extra-curricular activity together with skilled fishers from the islands.
- A total of 206 students (F = 82, M = 124) ranging in age from 9-15 years, and 15 teachers were involved in the training programme.
- Outreach activities included a climate change booth at the Rarotonga school careers day activity on 16.06.22 attended by 400 high school students; and the Science Expo, which aimed to encourage more involvement in science, technology, engineering and mathematics, and was held over a four-day period from 17-20.10.22 and attended by all grades from early childhood education to senior grades, as well as teachers, parents and community members.
- Two videos featuring youth in marine resources management have been prepared: “Connecting to strengthen climate change resilience in the Cook Islands” and “Empowering youth to conserve marine ecosystems” were produced.

Challenges

- Due to travel restrictions brought about by COVID-19, the consultations between the project team at SPC Fiji and government partners in Cook Islands during the project implementation period were convened entirely through virtual meetings. This arrangement was hampered by poor internet connections and different time zones.
- The travel restrictions also restricted the activities in the outer islands.
- Although the PDD was signed in 2020, it was not until the end of 2022 that work started on the refurbishment of the AMRC. Nevertheless, the AMRC upgrade was completed by the end of the implementation period (June 2023).

Lessons learnt

- Different funding modalities such as grant agreements, service contracts and direct procurement by SPC, need to be clearly understood at the outset of the project.
- Daily independent engineering oversight of an infrastructure project during the construction phase is recommended.
- The people centred approach utilised throughout the project, and especially in the integration of traditional knowledge into climate change education, focused particularly on youth and elders providing an opportunity for the exchange of knowledge between these groups and empowering future generations.

