

**COOK ISLANDS**  
**NATIONAL BIODIVERSITY STRATEGY AND ACTION PLAN**  
**RAROTONGA COMMUNITY WORKSHOP REPORT**

**VAKA COMMUNITY WORKSHOPS**  
**Between 25 September – 3 October 2024**

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October 2024

- Introduction ..... 3
- Workshop Locations..... 3
- Participants ..... 3
- Workshop Objectives ..... 3
- Key Discussion Points..... 3
- Workshop 1: Te Au Tonga – SINAI Hall ..... 4
- General Discussion:..... 4
- Summary ..... 4
- Strategic Goal 1: Area Management..... 4
- Strategic Goal 2: Species Management ..... 5
- Strategic Goal 4: Integrating Knowledge and Learning for Sustainability ..... 5
- Strategic Goal 5: Mainstreaming and Integrating Policies..... 5
- Conclusion..... 5
- Workshop 2: Puaikura – Calvary Hall ..... 6
- General Discussion:..... 6
- Summary ..... 6
- Strategic Goal 1: Area Management..... 6
- Strategic Goal 2: Species Management ..... 6
- Strategic Goal 3: Threats Management ..... 7
- Strategic Goal 4: Integrating Knowledge and Learning for Sustainability ..... 7

Strategic Goal 5: Mainstreaming and Integrating Policies.....	7
Conclusion.....	7
Workshop 3: Ngatangiia – Ngatangiia Sunday School Hall .....	8
General Discussion.....	8
Summary .....	8
Strategic Goal 1: Area Management.....	8
Strategic Goal 2: Species Management .....	8
Strategic Goal 3: Threats Management .....	9
Strategic Goal 4: Integrating Knowledge and Learning for Sustainability .....	9
Conclusion.....	9
Workshop 4: Takitumu – Titikaveka Sunday School Hall .....	9
General Discussions .....	9
Summary .....	9
Strategic Goal 1: Area Management.....	10
Strategic Goal 2: Species Management .....	10
Strategic Goal 3: Threats Management .....	10
Strategic Goal 4: Integrating Knowledge and Learning for Sustainability .....	10
Strategic Goal 5: Mainstreaming and Integrating Policies.....	10
Conclusion.....	11
Executive Summary.....	11
Workshop Attendance Analysis .....	12
Overall Conclusions.....	12
Next Steps .....	12
Annex A. Participants Attendance sheet .....	13
Annex B. Workshop Agenda .....	15

## Introduction

The National Environment Service (NES) conducted a series of community workshops across Rarotonga as part of the National Biodiversity Strategy and Action Plan (NBSAP) consultations. These workshops aimed to gather insights from the community to address biodiversity conservation, understand local environmental challenges, and align efforts with the Global Biodiversity Framework (GBF). The workshops were held in four Vaka locations between **25 September and 3 October 2024**, engaging participants in discussions around five strategic goals for biodiversity management.

## Workshop Locations

1. Te Au o Tonga – SINAI Hall:	25 Sep 2024	5 attendees
2. Puaikura – Calvary Hall:	26 Sep 2024	13 attendees
3. Ngatangiaa – Sunday School Hall:	2 Oct 2024	3 attendees
4. Takitumu – Titikaveka Sunday School Hall:	3 Oct 2024	4 attendees

## Participants

The workshops were poorly represented. Participants from backgrounds, including community leaders, conservation advocates, and local residents engaged in informal discussions. The attendance registers for each workshop are included in Annex A.

## Workshop Objectives

The main objectives of the workshops were:

- To gather community input on biodiversity conservation.
- To understand the environmental challenges the community faces.
- To identify local solutions that support national biodiversity targets and ensure alignment with the Global Biodiversity Framework (GBF).

## Key Discussion Points

Each workshop focused on five strategic goals related to biodiversity. Below is a detailed summary of the discussions that took place in each Vaka:

## Workshop 1: Te Au Tonga – SINAI Hall

**Date:** Wednesday 25<sup>th</sup> September 2024

**Attendees:** 5 attendees

### General Discussion:

- **Funding for biodiversity activities:** There is a need for increased funding to support conservation efforts, especially in areas such as community-driven biodiversity projects.
- **Enforcement of rules:** The community expressed the need for stricter enforcement and penalties for non-compliance with environmental regulations.
- **Composting and organic farming:** The group suggested promoting organic farming and composting practices over the next 10 years. A proposal was made to establish a model organic garden in the community for educational purposes.
- **Youth leadership programs:** The participants supported the creation of leadership programs that would focus on teaching organic farming and biodiversity conservation to the youth.

### Summary

The consultation at Te Au Tonga provided an opportunity to highlight key environmental issues and propose actionable solutions. Discussions centered on wetland restoration, stream and forest conservation, and protecting marine life. Participants also raised concerns about the decline of shellfish and other species due to pollution and invasive species. Community-driven programs, such as organic farming and youth leadership initiatives, were suggested to engage local residents in biodiversity conservation. The emphasis on integrating traditional knowledge with modern conservation strategies highlighted the community's desire for a holistic approach.

### Strategic Goal 1: Area Management

- **Wetland restoration:** Avatiu's wetland area was identified as a priority for protection and restoration, as it is currently used for rubbish dumping.
- **Stream and forest conservation:** Protecting streams and maintaining forested areas were considered critical to sustaining the ecosystem.
- **Ocean and reef protection:** The declining numbers of shellfish in the area were noted, possibly due to pollution. The community recommended that more be done to monitor and protect marine life.
- **Watershed protection:** The group highlighted the need to safeguard watersheds to ensure clean drinking water and environmental stability.

## Strategic Goal 2: Species Management

- **Shellfish populations:** The decline of species such as *ariri* close to shore was attributed to climate change and pollution. Measures were suggested to protect these species.
- **Eradication of invasive species:** The participants proposed an eradication program for invasive species like myna birds. A bounty system was recommended to encourage community involvement in the removal of invasive species.
- **Endemic species protection:** The group emphasized the need to protect native and endemic species from the impacts of invasive animals and environmental degradation.

## Strategic Goal 3: Threats Management

- **Erosion and pollution:** Hillside erosion and the presence of discarded tyres were seen as major threats to the environment. Participants expressed concerns about the impact of nitrogen runoff on the lagoon and marine ecosystems.
- **Impact on drinking water:** Pollution from various sources, including chemicals, was identified as a significant threat to drinking water quality.

## Strategic Goal 4: Integrating Knowledge and Learning for Sustainability

- **Preservation of traditional knowledge:** The importance of integrating traditional knowledge, particularly in farming and sustainable practices, into educational programs was stressed. The community called for more engagement with elders to pass on this knowledge to younger generations.

## Strategic Goal 5: Mainstreaming and Integrating Policies

- **Funding and community-driven initiatives:** The group called for greater financial support and stronger community involvement in biodiversity conservation efforts. They also emphasized the need for local leadership in environmental programs.

## Conclusion

The workshop demonstrated a clear interest in addressing biodiversity challenges, particularly through local initiatives and stricter enforcement of environmental regulations. Recommendations such as protecting watersheds, establishing organic gardens, and eradicating invasive species showcased the community's commitment to sustainable practices. However, broader community engagement and increased funding are essential to implement these solutions effectively.

## Workshop 2: Puaikura – Calvary Hall

**Date:** Thursday 26<sup>th</sup> September 2024

**Attendees:** 13 attendees

### General Discussion:

- **Access to funding:** The community highlighted the need for funding to support both marine and terrestrial conservation efforts.
- **Control of invasive species:** Participants discussed the increasing prevalence of albizia trees in the mountains, which are damaging the ecosystem. The group recommended a program to control albizia by drilling and applying a solution to kill the trees. This effort would require dedicated funding.

### Summary

The Puaikura workshop provided a platform for community members to discuss the impacts of urban development, invasive species, and inadequate waste management on local ecosystems. Key issues included hillside erosion, sand mining, and the declining health of marine species. The community emphasized the importance of preserving cultural and historical sites, such as Maungaroa Valley, and highlighted the need for sustainable practices within households. Suggestions included enhancing regulations, improving waste management systems, and fostering collaborations between traditional leaders and conservation programs.

### Strategic Goal 1: Area Management

- **Housing developments:** The group expressed concern over the growing number of houses being built on slopes and hills, which are destabilizing the landscape and contributing to erosion.
- **Sand mining:** Sand mining was identified as an issue, with sand being removed for construction purposes and clay being used as a substitute, impacting the lagoon's filtration and ecosystem. Participants recommended stricter regulations on sand mining.
- **Stream protection:** The removal of rocks from streams and the need to protect these water sources were discussed as critical to sustaining local ecosystems.
- **Cultural and historical site protection:** Maungaroa Valley was highlighted as an important site for biodiversity conservation and cultural heritage, and participants called for its preservation.

### Strategic Goal 2: Species Management

- **Bird species:** Participants noted an increase in native bird populations, such as the rupe, and discussed the need to plant more fruit-bearing trees to support them.

- **Marine species decline:** The decline of seafood in the lagoon was attributed to climate change, and participants recommended the establishment of more ra'ui (protected areas) to preserve these species.
- **Chickens and food scarcity:** The movement of chickens into the villages was noted as a sign of food scarcity in the mountains, which might be due to deforestation and loss of habitat.

### **Strategic Goal 3: Threats Management**

- **Albizia control:** Participants discussed the rapid spread of albizia on the mountains and the need for eradication programs.
- **Waste management:** The lack of proper waste management, including the need for an incinerator, was discussed as a key issue affecting the village.
- **Chemical pollution:** Chemicals used in swamp areas were identified as contributing to marine life depletion, and participants urged for alternative, environmentally friendly practices.

### **Strategic Goal 4: Integrating Knowledge and Learning for Sustainability**

- **Home-based changes:** Some participants emphasized that sustainability initiatives should start within households, encouraging families to adopt more environmentally conscious behaviors.

### **Strategic Goal 5: Mainstreaming and Integrating Policies**

- **Strengthening regulations:** The group advocated for stronger rules and regulations, particularly related to environmental protection and conservation. There was also a call for better linkages between traditional leaders and environmental programs to ensure community-wide involvement.

### **Conclusion**

Participants at Puaikura demonstrated strong awareness of environmental challenges and a proactive approach to conservation. Their recommendations focused on addressing the root causes of biodiversity loss, such as urban development and invasive species, while promoting traditional knowledge and household-level sustainability. These insights will be instrumental in shaping targeted actions within the NBSAP framework.

## Workshop 3: Ngatangiia – Ngatangiia Sunday School Hall

**Date:** Wednesday 2<sup>nd</sup> October 2024

**Attendees:** 3 attendees

### General Discussion

- Participants discussed critical biodiversity issues, including the impact of invasive species, stagnant wetlands, and the erosion of traditional agricultural practices.
- The conversation highlighted the importance of clearing streams to improve water flow and protecting areas like the Koitu Raukura site under traditional conservation practices (ra'ui).
- Addressing pests such as rats and ants was seen as crucial to protecting crops and biodiversity.
- Participants emphasized the need to revive traditional planting methods and integrate this knowledge into community conservation efforts.

### Summary

The NBSAP community consultation for Ngatangiia was held to gather insights on local biodiversity challenges and explore potential solutions aligned with the National Biodiversity Strategy and Action Plan (NBSAP). Three people attended the session, highlighting issues related to environmental management, invasive species, and traditional practices.

### Strategic Goal 1: Area Management

- **Wetland Management:** The wetland in Karekare has stagnant water, causing issues with water flow. Clearing the stream is necessary to allow the water to flow and improve the area.
- **Ra'ui:** The Koitu Raukura site in Avana should be protected under a ra'ui (traditional conservation area) to safeguard the species found there.

### Strategic Goal 2: Species Management

- **Invasive Species:** There is an increase in invasive plants in the mountains and a growing number of ants, both of which threaten local biodiversity.
- **Pai Taro:** The Pai taro crop is being covered by polythene, affecting its growth and productivity.
- **Traditional Knowledge:** There is a need to revive traditional knowledge (TK) on planting methods to maintain sustainable agricultural practices.

### **Strategic Goal 3: Threats Management**

- **Pests:** Rats and ants are becoming a significant issue in the area, impacting biodiversity and crops.

### **Strategic Goal 4: Integrating Knowledge and Learning for Sustainability**

- **Traditional Knowledge:** The community expressed a strong need to restore traditional knowledge, especially related to planting methods, which have declined over the years.

### **Conclusion**

The Ngatangia consultation highlighted the community's concern with invasive species, stagnant water in wetlands, and the need to revive traditional agricultural knowledge. Protecting local biodiversity through better management of ra'ui sites and addressing invasive pests is crucial to safeguarding the natural environment in the area.

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## **Workshop 4: Takitumu – Titikaveka Sunday School Hall**

**Date:** Thursday 3rd October 2024

**Attendees:** 4 attendees

### **General Discussions**

- The Takitumu workshop addressed issues such as invasive species, nutrient pollution, and biodiversity loss.
- Concerns were raised about the decline in seafood species, the ineffectiveness of current weed management practices, and the lack of respect for protected areas (ra'ui).
- Participants discussed the loss of traditional fishing practices and the need to engage younger generations in conservation efforts.
- Policy recommendations included introducing measures to control pet ownership and strengthening biosecurity between islands to curb the spread of invasive species.

### **Summary**

The NBSAP consultation held at the Titikaveka CICC Sunday School Hall on October 2, 2024, aimed to engage the community in discussions around biodiversity conservation. Four people attended, raising concerns about invasive species, biodiversity loss, and the lack of community engagement in environmental stewardship.

## Strategic Goal 1: Area Management

- **Development Impact:** Development inland and along the coast is contributing to biodiversity loss, with sand shifting along the coastline during different seasons.
- **Ra'ui:** The Motukore ra'ui is not respected, and poaching is occurring within the conservation area, undermining efforts to protect local biodiversity.
- **Inland Food Loss:** Invasive plants are covering the mountains, resulting in the loss of food sources and contributing to biodiversity challenges.

## Strategic Goal 2: Species Management

- **Invasive Species:** Farmers are struggling with invasive species on mango trees, weeds (e.g., mile-a-minute), and other new plant species appearing in taro patches.
- **Weed Management:** Farmers are using weedicides to manage weeds, but the effectiveness of these chemicals is questioned.
- **Seafood Decline:** Species like octopus, patito, and shellfish are becoming scarce in the lagoon due to overharvesting and nutrient pollution.

## Strategic Goal 3: Threats Management

- **Pests:** Rats and bugs are damaging food crops, especially mangoes, and are a major concern for local farmers. Additionally, nutrient overloading from pollution is affecting marine life.
- **Ciguatera Poisoning:** Concerns were raised about ciguatera poisoning in lagoon fish, which is becoming more common, and people are now afraid to consume local fish.

## Strategic Goal 4: Integrating Knowledge and Learning for Sustainability

- **Traditional Knowledge (TK):** There is a loss of traditional knowledge, particularly in fishing practices. The younger generation is disengaged from learning traditional skills, further impacting sustainability.
- **Community Engagement:** The community expressed frustration that many people in Rarotonga do not take responsibility for the environment. They suggested using modern tools, such as social media, to increase biodiversity awareness and community involvement.

## Strategic Goal 5: Mainstreaming and Integrating Policies

- **Cats and Dogs Policy:** The number of cats and dogs per household is impacting local biodiversity, and a policy to control pet ownership was suggested.

- **Biosecurity:** There is a need for stronger biosecurity measures between islands to prevent the spread of invasive species.

## Conclusion

The Titikaveka consultation emphasized the community's concerns regarding invasive species, biodiversity loss in the lagoon, and the need for better community engagement. The community highlighted the loss of traditional knowledge and stressed the importance of restoring it to ensure the sustainability of local biodiversity. Improved biosecurity and management of ra'ui sites were also deemed critical to preserving the area's biodiversity.

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## Executive Summary

The Rarotonga Vaka workshops, held between 25 September and 3 October 2024, aimed to engage communities in biodiversity conservation discussions under the National Biodiversity Strategy and Action Plan. The consultations highlighted pressing concerns, such as invasive species, nutrient pollution, and the loss of traditional knowledge.

### Key Recommendations:

- **Integration of traditional knowledge:** It was recommended that traditional knowledge be integrated into modern education systems, particularly in areas such as sustainable farming, fishing, and biodiversity conservation.
- **Wetland and Ra'ui Management:** Clearing stagnant water in wetlands and protecting traditional conservation sites (ra'ui).
- **Invasive Species Management:** A coordinated effort to eradicate invasive species, particularly myna birds and albizia trees, was recommended, with community involvement incentivized through bounty programs.
- **Biosecurity Strengthening:** Strengthening biosecurity measures to prevent the spread of invasive species.
- **Collaborative Efforts:** Fostering collaboration between households, traditional leaders, and conservation programs to enhance sustainability efforts. Integrating community engagement strategies, including modern tools like social media, to raise awareness.
- **Increased funding and community involvement:** There is a strong need for financial support to bolster biodiversity initiatives and foster community-driven conservation projects.
- **Organic farming promotion:** Encouraging organic farming practices and establishing model gardens could raise awareness and support sustainable land use practices.
- **Waste management improvements:** Participants advocated for the introduction of better waste management systems, including an incinerator, to address pollution and its environmental impact.

Key recommendations focus on increased funding, integrating traditional knowledge into modern practices, and ensuring stronger policy enforcement for conservation and biodiversity management.

## Workshop Attendance Analysis

Attendance varied across workshops, with some locations like Puaikura drawing 13 attendees and others such as Ngatangia only three. Despite the differences in turnout, the input provided was valuable and representative of pressing biodiversity issues. The low turnout highlights the need for enhanced outreach and community mobilization in future consultations.

## Overall Conclusions

The four Rarotonga Vaka workshops highlighted community concerns and aspirations for biodiversity conservation.

### Key insights:

- **Invasive Species Management:** The need for targeted programs to manage myna birds, albizia trees, and pests like rats and ants.
- **Pollution and Wetland Management:** Addressing nutrient pollution and clearing stagnant water to improve wetland and lagoon ecosystems.
- **Traditional Knowledge Integration:** Preserving and integrating traditional knowledge into education and conservation efforts to engage younger generations and ensure sustainability.
- **Respect for Protected Areas:** Enhancing respect for protected areas (ra'ui) and improving policy measures for pet ownership and biosecurity.
- **Community-Driven Initiatives:** Promoting community-driven initiatives, with modern engagement tools fostering broader participation.

Despite low attendance in some workshops, the insights gathered will inform the updated NBSAP, aligning it with community priorities and global biodiversity goals. These discussions underscore the need for stronger community outreach and collaboration to implement practical solutions effectively.

## Next Steps

The insights gathered will inform the prioritization of strategic actions in the updated NBSAP. Future workshops will address identified gaps, and targeted outreach will be employed to ensure broader community participation.

**Annex A:** Participant Registers

**Annex B:** Workshop Agenda

## Annex A. Participant Attendance Sheet for the four workshop

**NATIONAL ENVIRONMENT SERVICE**  
TU'ANGA TAPOROPORO  
COOK ISLANDS

**THE BIODIVERSITY PLAN**  
For Life on Earth

**Cook Islands National Biodiversity Strategy and Action Plan (NBSAP) Workshop**  
25 September 2024 | SINAI HALL, TE AU TONGA VAKA, Rarotonga, Cook Islands

**Attendance Sheet**

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Page 1 1

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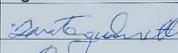
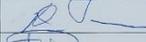
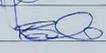
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Titikaveka  
consultations

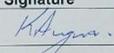
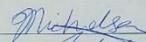
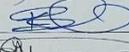
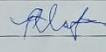
**Cook Islands National Biodiversity Strategy and Action Plan (NBSAP) Workshop**  
Attendance Sheet

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Ngatangiia  
consultations

7.

**Cook Islands National Biodiversity Strategy and Action Plan (NBSAP) Workshop**  
Attendance Sheet

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## **Annex B. Workshop Agenda**

1. Opening Prayer and Welcoming Remarks
2. Rapid Review on NBSAP 2002
3. Guidance to drafting National Goals and Themes with recommended National Goals and Themes
4. Open discussions
5. Closing prayer