

Priority adaptations to climate change for fisheries and aquaculture in Nauru: reducing risks and capitalising on opportunities

16 January 2013

Civic Centre Conference Hall, Aiwo, Nauru

Background

Fisheries and aquaculture are vital to the development goals of the Pacific Islands region. Nowhere else in the world do so many countries and territories depend as heavily on the benefits derived from catching or growing fish and shellfish. Industrial fish processing operations and fishing fleets account for a substantial proportion of gross domestic product in several countries and territories. Licence fees from distant water fishing nations make even more significant contributions to government revenue, especially for small island states.

Fish is also a cornerstone of food security in the region. Fish consumption is at least 2–4 times greater than the global average in more than half of all 22 Pacific Island countries and territories (PICTs). In rural areas, fish often makes up 50–90% of dietary animal protein and most of the fish consumed (60–90%) comes from subsistence fishing.

Fisheries and aquaculture are also an important source of jobs, opportunities to earn income and food security. Nauru has an annual per capita consumption of fresh fish of 56 kg and about half the population (4513 people, 2947 males and 1566 females) are engaged in fishing activities with an annual catch estimate of 420 tonnes of finfish and 231 tonnes of invertebrates. Catches of tuna by licensed foreign industrial fishing vessels (mainly purse seiners) in Nauru's exclusive economic zone (EEZ) average 60,000 tonnes per annum. Traditionally, Nauru was involved in extensive milkfish aquaculture and there is a move to revive this activity with the aim of substituting importation of marketable size milkfish.

To maintain or improve the important contributions made by fisheries and aquaculture in the face of the many drivers affecting the sector, many PICTs are implementing the plans required to (1) optimise the economic benefits derived from industrial tuna fisheries, (2) provide sufficient fish for the food security for rapidly growing populations, and (3) identify the number of livelihoods that can be sustained from coastal fisheries and aquaculture.

Climate variability and climate change are among these drivers and climate change is expected to progressively increase in significance. SPC is assisting PICTs to understand how climate change may affect their plans to maintain or improve the benefits they derive from fisheries and aquaculture. To do this, SPC has co-ordinated a comprehensive assessment of the vulnerability of tropical Pacific fisheries and aquaculture to climate change¹. The Food and Agriculture Organisation of the United Nations has produced a

¹ Available at <http://cdn.spc.int/climate-change/fisheries/assessment/>

global overview of the current scientific knowledge and adaptation and mitigation options for the sector².

With the support of SPC, the Nauru Fisheries and Marine Resources Authority is organising this workshop to help the broad range of stakeholders in fisheries and aquaculture use this information to identify priority adaptation actions to climate change, with the ultimate aim of building resilience and flexibility at the community and enterprise levels.

Objectives of the Workshop

The objectives of the workshop are to provide the government departments and state owned enterprises in Nauru, non-government organisations, communities, private enterprises and individuals with a sound understanding of (1) the main projected effects of existing climate variability, global warming and ocean acidification on the ecosystems supporting fisheries and aquaculture; (2) the consequences for current and future production and revenue, food security and livelihoods; and (3) the actions required to reduce the risks and capitalise on the opportunities.

An interactive format will allow participants to work closely to:

- understand the direct and indirect effects of climate change and ocean acidification on oceanic and coastal fisheries production and aquaculture;
- identify the implications of the projected changes to fisheries and aquaculture activities for economic development, food security and livelihoods;
- choose and prioritise the adaptations and policies needed to build the resilience of enterprises and communities to the projected threats and to equip them to take advantage of the potential opportunities; and
- localise vulnerability assessments and communicate the adaptation actions needed to communities.

Expected Outputs

Participants will leave the workshop with (1) an increased awareness of climate change implications for fisheries and aquaculture in Nauru; (2) knowledge of the tools to better understand the vulnerabilities of enterprises and communities to these changes; and (3) clear ideas about the planning and actions needed to assist the sector adapt to climate variability and climate change (including the risk of climate-induced natural disasters).

² Available at <http://www.fao.org/docrep/012/i0994e/i0994e00.htm>

Programme for the workshop on the climate change, fisheries and aquaculture in Nauru

Wednesday 16 January 2013

09h00	Registration – Civic Centre Conference Hall, Aiwo
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Session 1: Welcome and introduction

09h20	Welcome, opening remarks and prayer
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09h40	Objectives and structure of the workshop – Johann Bell
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COFFEE & TEA: 10h00 – 10h30

Morning Session: Understanding projected changes to surface climate and the ocean

10h30	Observed and projected changes to surface climate – Johann Bell
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10h50	Observed and projected changes to the ocean – Johann Bell
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11h20	Breakout groups to discuss projected climate change impacts
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LUNCH: 12h10 – 13h10

Understanding projected changes to coastal fisheries and aquaculture in Nauru

13h10	Coastal fisheries and climate change – Monte Depaune
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13h30	Aquaculture and climate change – Monte Depaune
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13h50	Community fisheries and climate change – EbelinaTsiode
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14h10	Breakout groups to discuss projected changes to coastal fisheries and aquaculture
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COFFEE & TEA: 15h00 – 15h30

Understanding projected changes to tuna resources for Nauru

15h30	Tuna resources and climate change – Monte Depaune
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15h50	Adaptations and supporting policies – Johann Bell
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16h10	Breakout groups to discuss projected changes to tuna resources and adaptations
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17h00	Close of Workshop
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