The Crawford Fund supporting capacity development in fisheries in SE Asia and the Western Pacific

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Presentation to The Crawford Fund Forum
Government House, Tasmania
10 May 2017
History of collaboration between CSIRO and Indonesia

Southern bluefin tuna (SBT)

Drawing by Roger Swainston

Thunnus maccoyii
Indonesia - CSIRO Collaborations on tuna fisheries

Monitoring fisheries
  – Improvements to data collection and reporting

Capacity development for Indonesian scientists

Fisheries assessments

Addressing challenges of fisheries management

Harvest Strategy Development

Sustainable fisheries
Fish Ageing Training Workshop  2012

17 participants
5 days
Master Class - Methods for assessing data-poor fisheries    Aug 2015

39 participants
5 days
Capacity building in Papua New Guinea fisheries and conservation

• National Fisheries Authority (NFA) in PNG vision is:
  "Effectively Managing our Fisheries and Marine Resources for Sustainable and Equitable Benefits"
  - purpose is to pursue this vision to fulfil national and global obligations

• A large project on PNGs shark fisheries (funded by ACIAR, 2014-17) aims to improve capacity for ecological, socioeconomic and stock assessment aspects of fisheries management

• Sharks and rays are one of the most highly threatened groups of organisms on the planet and are extremely susceptible to overfishing

• There are increasing pressures from the international community for developing countries to better manage and conserve their shark and ray resources

• The Crawford Fund has assisted this project improve capacity in two separate projects
Capacity building in Papua New Guinea fisheries and conservation

Project 1:
- “Conservation management of elasmobranchs: an introduction into the Red List of Threatened Species”
- The IUCNs Red List of Threatened Species is the world’s most comprehensive inventory of conservation status of biological species
- In February 2015, an Australian region Red List expert workshop was held in Townsville
  - Project funded an NFA staff member (Leontine Baje) to attend this expert workshop
  - Provided training in the process
  - Allowed her to assist in the development of multiple Red List assessments
  - Introduced her to experts in the field in an atmosphere which fostered communication
Capacity building in Papua New Guinea fisheries and conservation

Project 2:

• “Age and growth determination in fishes and curatorial training for museum collections”
• Establishing students in-country (PNG) proved difficult due to inadequate resources, proper equipment and expertise

• In February 2017, a workshop was held between CSIRO’s Australian National Fish Collection in Hobart and James Cook University in Townsville for 2 University of PNG staff
  • 1 professor of marine biology (Dr Ralph Mana) and 1 prospective student (William Tamarau)
• Training in top class laboratories
• Exposure to specialised equipment by experts
• Aim to establish a supervisory link between UPNG and Australia for future students using data and samples collected during projects
Capacity building in Thailand

• The Bay of Bengal Large Marine Ecosystem (BOBLME) project funded a large array of projects throughout the 8 countries which border this body of water.
  • Over 400 million people are dependent on coastal and marine resources

• CSIRO led several projects funded by BOBLME and The Crawford Fund assisted with capacity building projects

• One project led by the CSIRO’s ANFC in 2014 aimed to determine whether a rapid market survey technique developed in Indonesia (ACIAR funded) was transferrable to their similarly complex fisheries

• In Thailand, the complexity of the fisheries and limited access granted to us during surveys emphasised the need for local researchers to lead the research
Capacity building in Thailand

• The Crawford Fund project – “Elasmobranch identification, market sampling, biology and age and growth”

• A prospective Master’s student (Sirachai (Shin) Arunrugstichai) from Prince of Songkla University was funded to visit the CSIRO’s Australian National Fish Collection in Hobart and James Cook University in Townsville for training

• Training provided allowed Shin to enroll in a Master’s program and undertake surveys of sharks and rays in the Bay of Bengal region of Thailand, the first such study

• Provided Shin with the access to expertise and training to undertake his research which wasn’t available in-country

• Currently finalising his Master’s thesis
Thank you

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