

ARAFURA AND TIMOR SEAS ECOSYSTEM ACTION

A Regional Cooperation

1st Asia Pacific Regional Targeted Workshop for GEF IW Projects
Bangkok, 27 September 2012

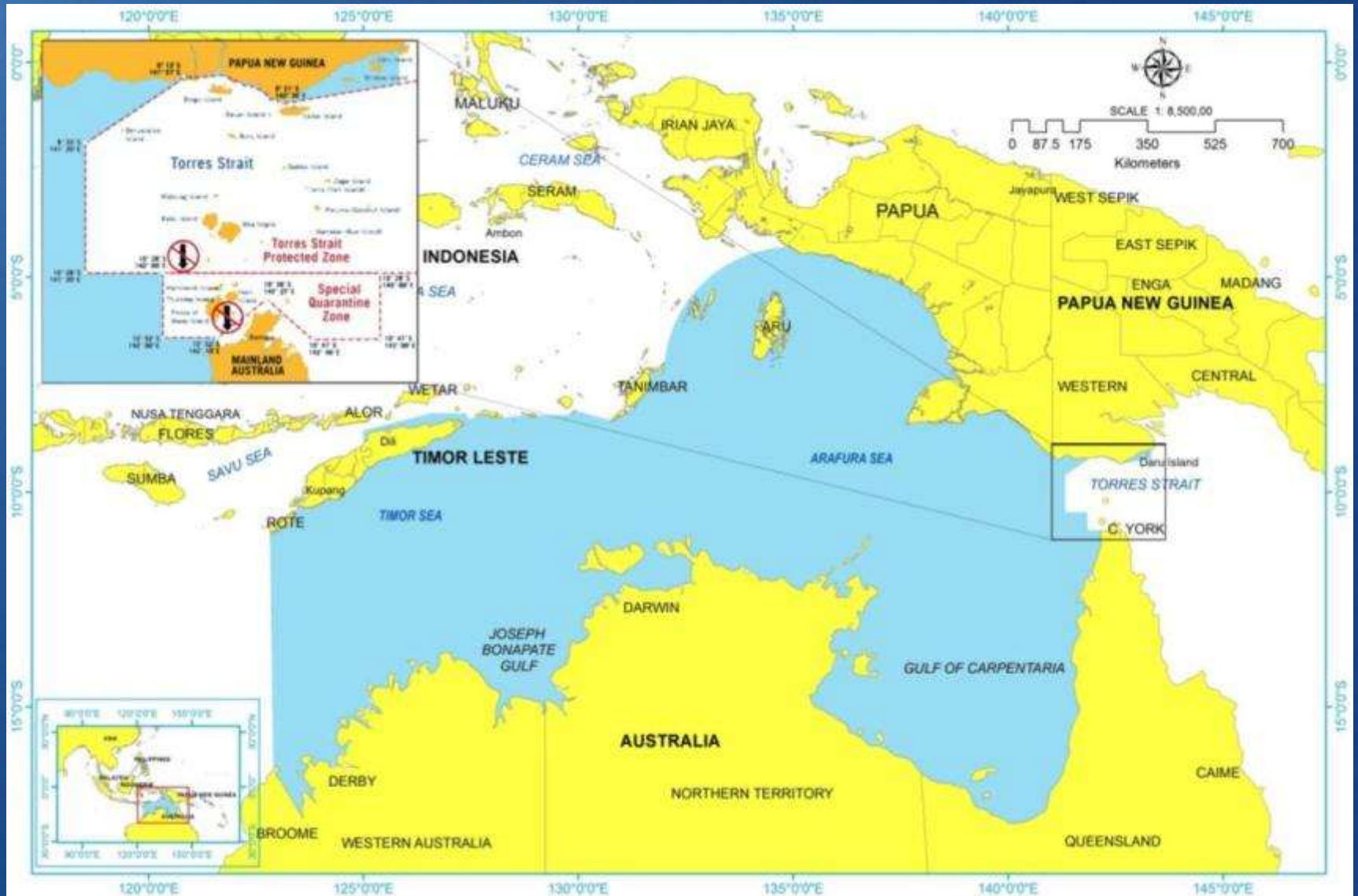


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The Region



Project Facts



DURATION: 4 years (July 2010 - June 2014)

COUNTRIES : Indonesia, Timor-Leste, Australia (non-GEF fund recipient)

FUNDING: GEF (grant) = USD 2,500 K
Co-finance = USD 6,200 K

Objective of this project is to develop strategic programs in Arafura and Timor Seas region which supported by **regional cooperation and financing mechanism from all ATSEA countries governments.**



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Project Components



Component 1: Transboundary Diagnostic Analysis (TDA)

Identify transboundary environmental issues in ATS and define their root causes. **TDA report is complete and approved by ATSEA Project Board on March 2, 2012.**

Component 2: SAP/NAPs development

Develop a regional Strategic Action Programme and National Action Programmes to address issues identified in TDA.

Component 3: Early implementation of SAP and NAPs

Implementing priority Action Plans (Regional and National). The result will become a baseline to enter the second phase of ATSEA, which will implement All SAP.



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Project Components (contd)

Component 4: Regional Cooperation Mechanism

- **Regional cooperation mechanism:** Develop a regional cooperation concept by strengthening ATSEF as an effective forum to bridge communication among ATS littoral nations. This mechanism must be approved and supported by all government.
- **Sustainable self-financing:** Develop a sustainable self-financing to ensure implementation of SAP.

Component 5: Project Management and Coordination

Project is effectively coordinated and managed, according to budget and work plan, including M&E arrangements and procedures.



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Priority transboundary issues

(ATSEA TDA Report, 2012)

Priority Environmental Concerns	Key Causal Factors
1. Unsustainable fisheries & decline & loss of living coastal & marine resources	illegal, unreported and regulated fishing; overexploitation; unsustainable practices; fisheries by-catch
2. Modification, degradation & loss of coastal & marine habitats	coastal development, bottom trawling, fuel wood (mangroves), dynamite fishing, pollution (sediments)
3. Marine & land-based pollution (e.g. marine debris, sediments, oil spills)	Coastal development (nutrients, sediments), mining (sediments, toxicants), land degradation (sediments), oil spills, marine debris
4. Decline & loss of biodiversity & key marine species	illegal harvesting, traditional indigenous harvest, fisheries by-catch (ghost nets, trawling, tuna long-lines), habitat loss
5. Impacts of climate change including ocean warming and ocean acidification	Fossil fuel-based global energy consumption, land use, Land use change and forestry

Climate prediction in ATS



(ATSEA Biophysical Profile Report, 2011)

- Projection for temperature indicate an increasing trend for target years 2020, 2050 and 2080 on the order of 0.8°C, 1.5°C and 2.2°C, respectively
- Extreme temperature events are expected to increase in frequency and duration, and temperatures may rise during these events by up to 2.3°C
- Projection for rainfall indicate an increasing trend of 2%, 4%, and 6% by 2020, 2050, and 2080, respectively in line with an expected increase in the inter-annual variability of Asian monsoon
- The dry season will become drier
- Extreme rainfall events are expected to increase in intensity but become less frequent
- Mean sea-level is predicted to rise by 3.2 – 10 cm by 2010, 8.9 – 27.8 cm by 2050 and 18 -79 cm by 2095
- Relative to the 1990s, ocean pH is expected to decline in the region by 0.16-0.17 by 2070



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Impacts of climate change



(ATSEA TDA Report, 2012)

Low profile coasts, shallow continental shelves and macro-tidal conditions mean that the coastal and marine environments of the ATS region are particularly vulnerable to the impacts of climate change.

By 2100, sea-level is projected to rise by between 18 and 59 cm. In the coast of West Papua, trend in sea level rise has been predicted to be between 0.75 - 0.765 cm/year. Such a rise in sea level is expected to increase the salinity of coastal groundwater as aquifers are affected by salt water intrusion.

The low-lying coastal ecosystems of Northern Australia, such as mangroves and other wetlands, may be particularly vulnerable to climate change. The interactive effects of rise in sea-level and cyclonic intensity, increased coastal inundation and storm surges may result in these ecosystems either retreating landwards as sea-level rises or disappearing if inundation is rapid and coastal relief is low.

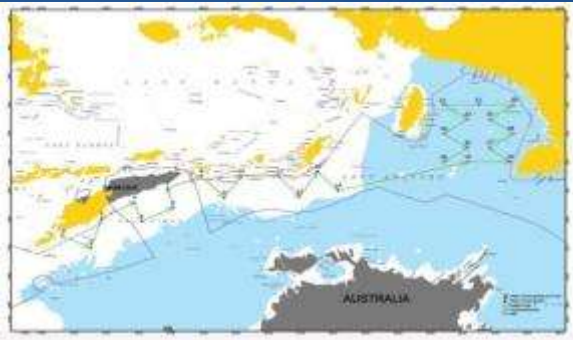
Predicted rises in sea-level up to nearly 80cm by the end of the century will impact rocky intertidal, mud- and sand-flats, coral reef, seagrass and mangrove communities.

ATSEA Highlight



ATSEA Cruise 1 – Baruna Jaya VIII, May 2010

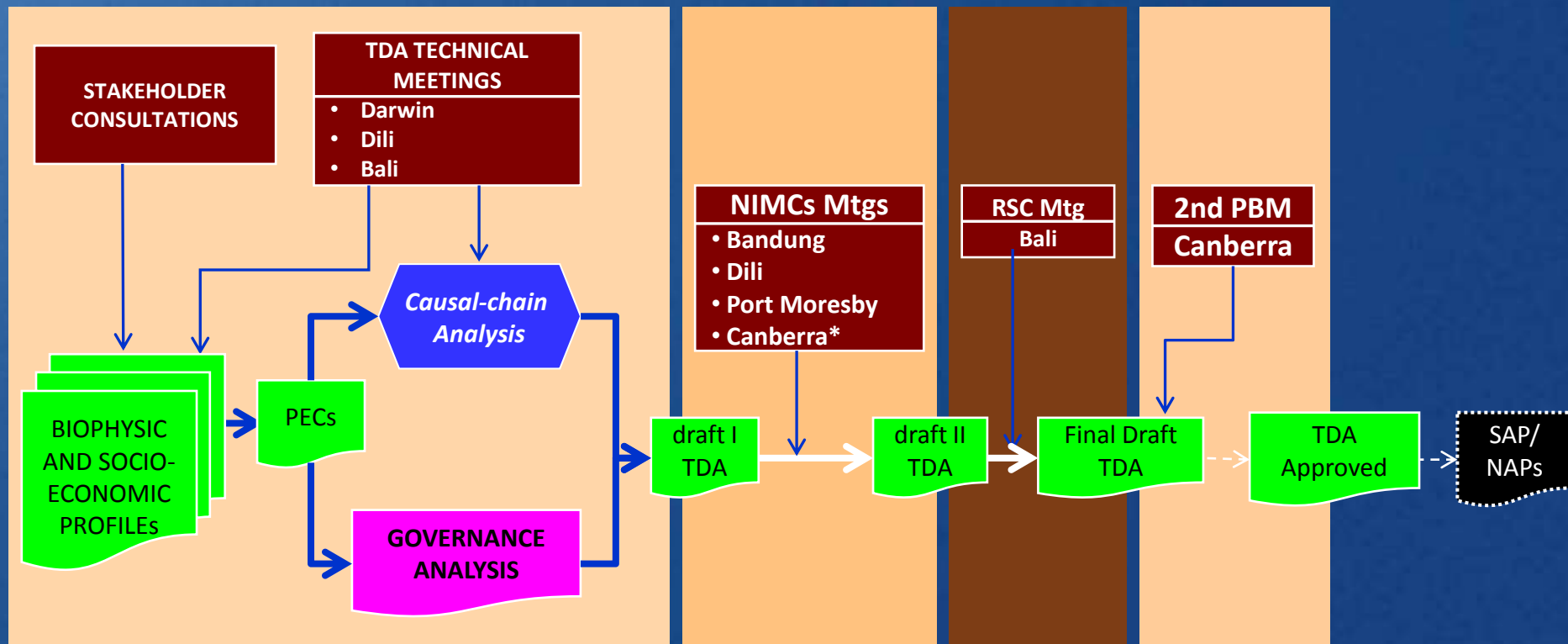
ATSEA Cruise 2 – RV Solander, July 2011



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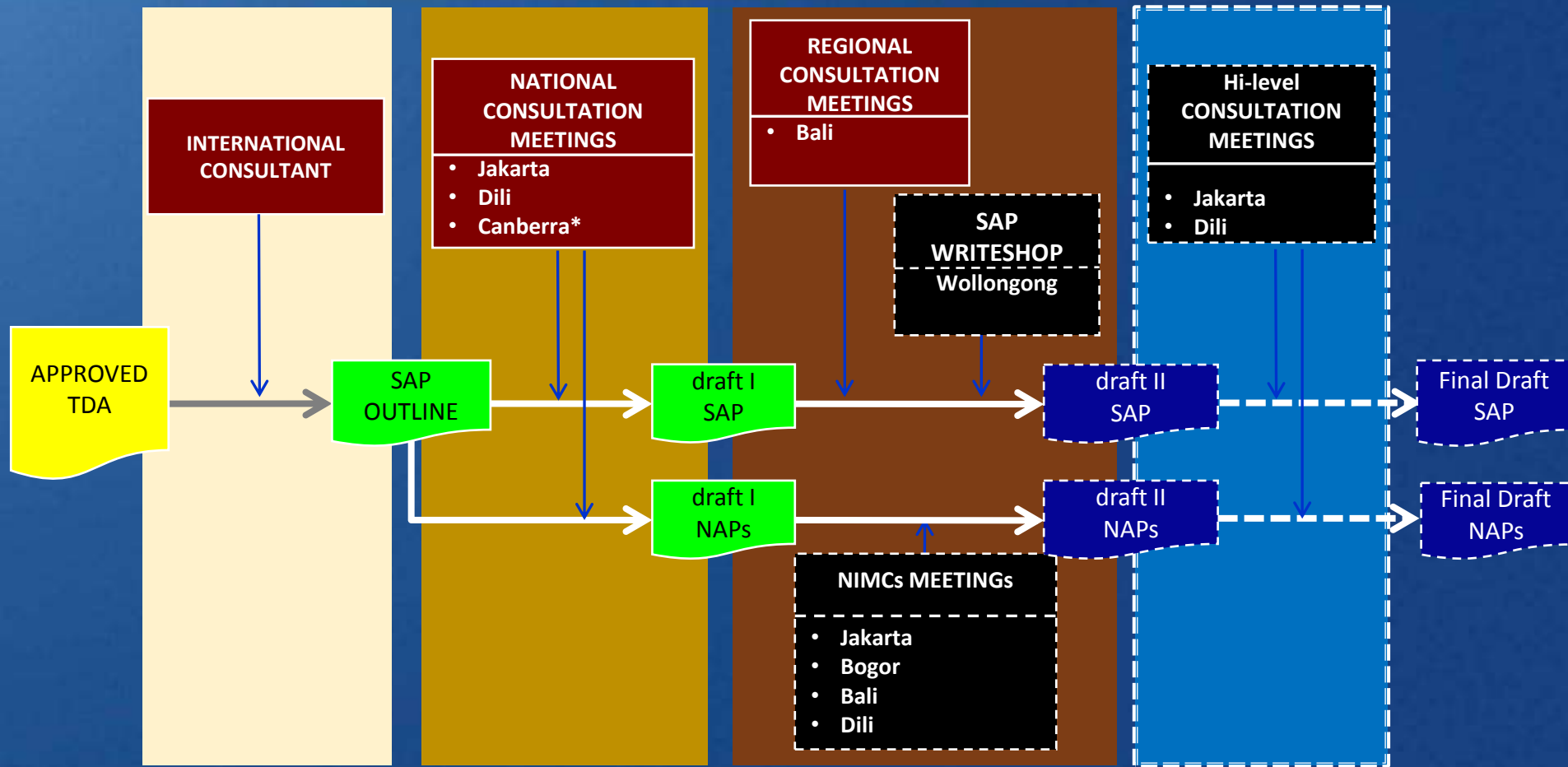


Flowchart of TDA



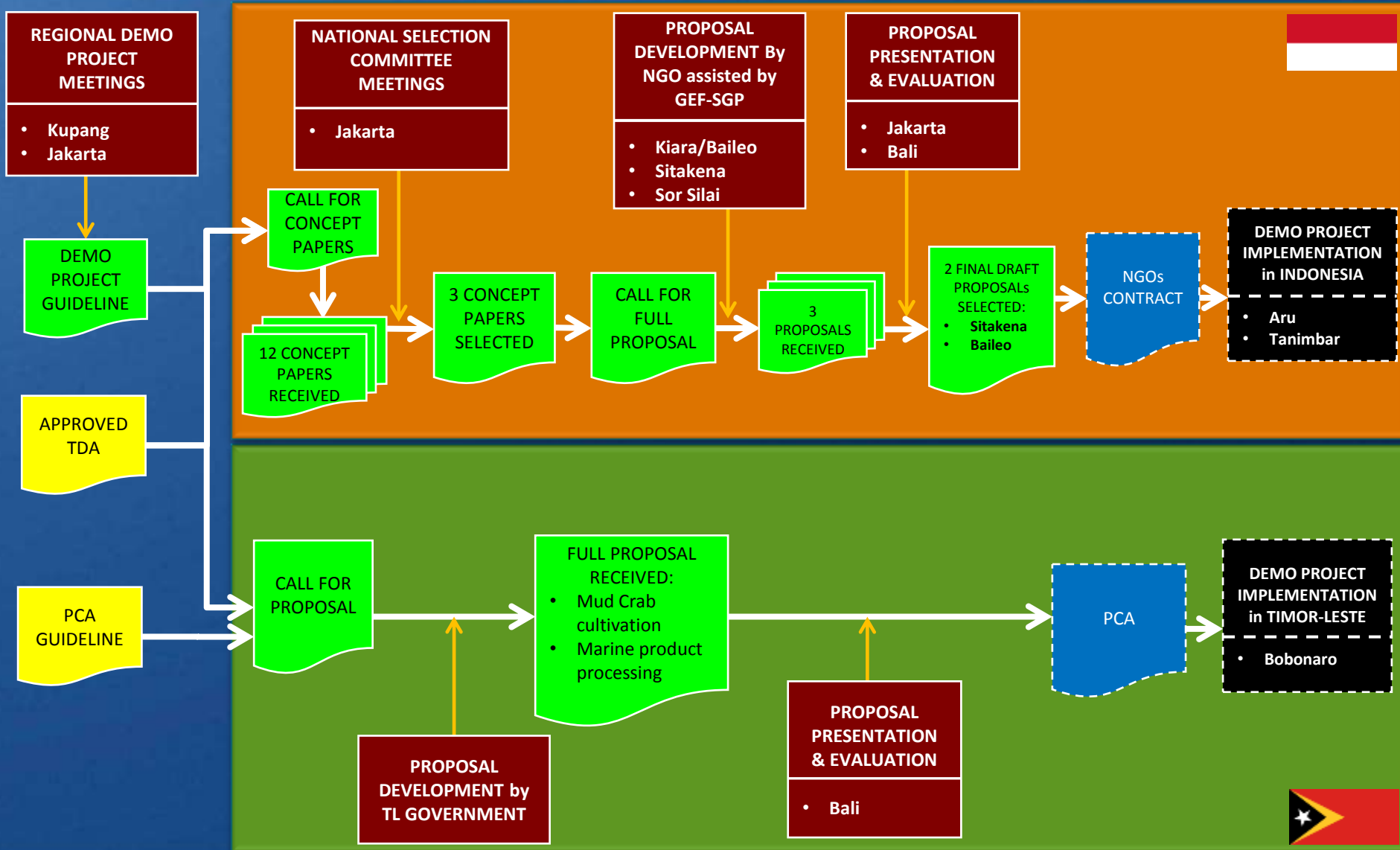
* = intersessionally

Flowchart of SAP/NAPs Development



* = intersessionally

Flowchart of Demo Projects



Challenges

- Policy coordination (with a greater number of organizations involved, duplication and unnecessary administrative burdens must be avoided)
- Prioritization (important in the development of the SAP)
- Engagement of government stakeholders (how to facilitate government acceptance/endorsement of the NAPs and SAP)
- Implementation (how to implement project activities at the district level following national government approval)
- Information dissemination (how to socialize ATSEF and ATSEA projects amongst the general population)
- Partnerships (how to extend collaboration with other regional projects/initiatives)
- Limited information about models of regional cooperation mechanisms available for use by governments as reference



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Priority need for capacity building

- Information and Communication Technology
- Climate change adaptation



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Partnership



- Civil Society Organisations/NGOs:
 - ✧ **Sustainable Fisheries Partnership (SFP)**, conduct a study of supply chain for red snapper fisheries in Arafura Sea.
 - ✧ **Census of Marine Life (COML)**, review the Marine Biodiversity in Arafura and Timor Seas.
- Indigenous Peoples:
 - ✧ **Ghostnet Australia**, address Marine Debris issue in Arafura and Timor Seas. This organisation is working mainly with indigenous communities along the north coast of Australia.
- **GEF Small Grants Programme**, provides assistances to the project in demonstration project preparation, implementation and evaluation
- Other Partners:
 - ✧ **Australian Institute of Marine Science (AIMS)**, partnership for purpose of conducting the ATSEA Cruise-2 in the Timor Sea



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Thank You



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