Climate Change Adaptation Progress in Timor Leste

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Outline

I. Introduction

II. Key Climate Change Risks and Vulnerabilities in TL

III. Adaptation Projects and Activities

IV. Monitoring and Evaluation toward NAPA Implementation

V. A national roadmap for the process to formulate and implement NAP

VI. Regulatory Framework for NAP

VII. Institutional Arrangement for NAP

VIII. Key components of National Development Planning for prioritizing adaptation efforts

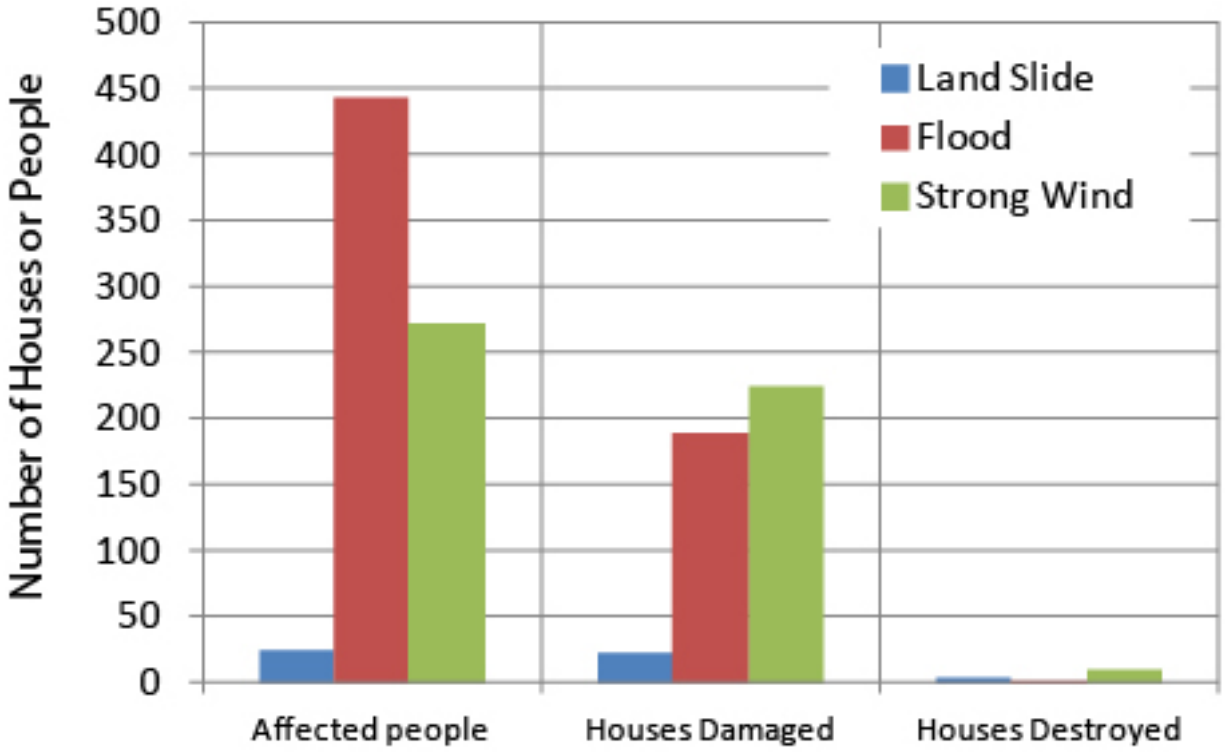
I. Introduction

- Timor-Leste gained its independence on 20 May 2002
- Half of Small island covering 14,610 km2 with population of approximately 1.2 million
- Timor-Leste ratified the UNFCCC on 11 April 2006 and came into force on 8 January 2007
- The country ratified KP in March 2008 and came into force on 12 January 2009
- The Country submitted its NAPA in 2011 and INC in 2014
- CC impacts and vulnerability assessments were undertaken for both NAPA and INC

II. Key Climate Change Risks and Vulnerabilities in TL

- TL has been increasingly affected by floods, land slides, strong wind, drought and sea level raise
- Some key development sectors are vulnerable to the impacts of climate change including agricultura and food security, water resource, infastructure, helth etc.

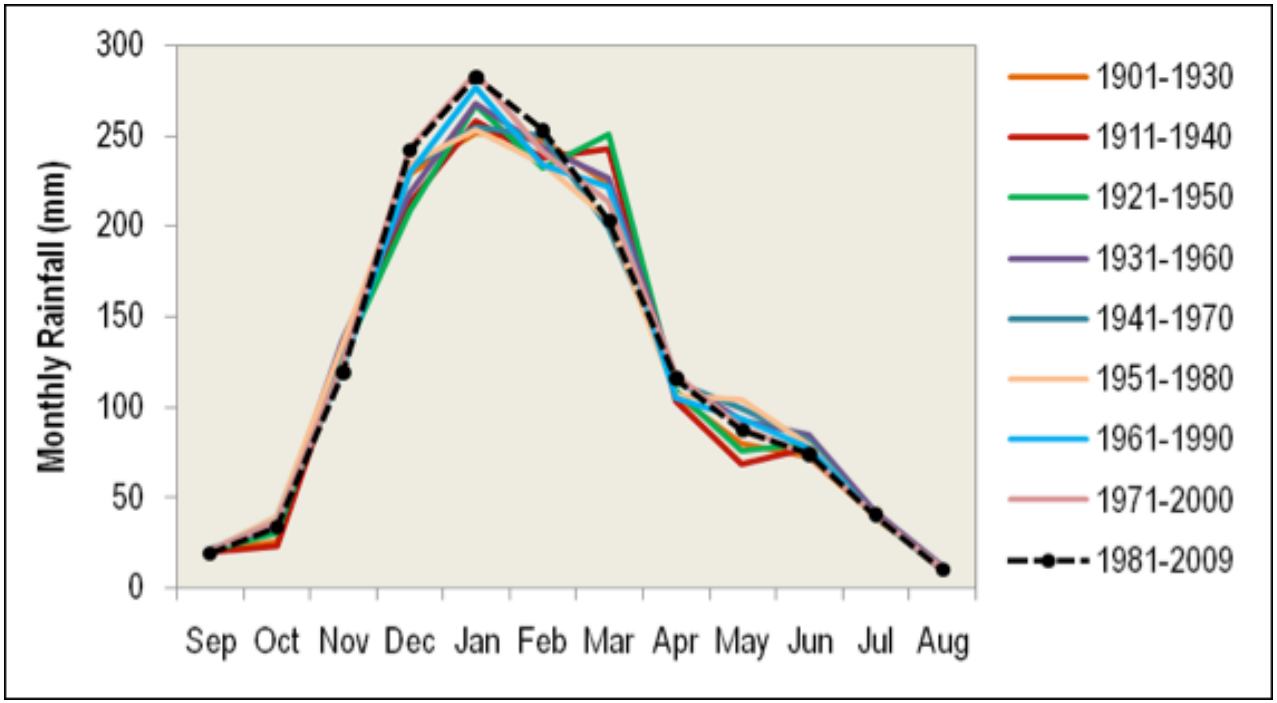
Key climate Risk...cont



Annual average of number of households or houses impacted by the three main climatic hazards in Timor-Leste (2001-2010)

Key Climate Risks...cont

- Monthly rainfall has changed mostly apparent in December, January, March and May, indicating an increase in rainfall during the rainy season (INC, 2014) causing flooding

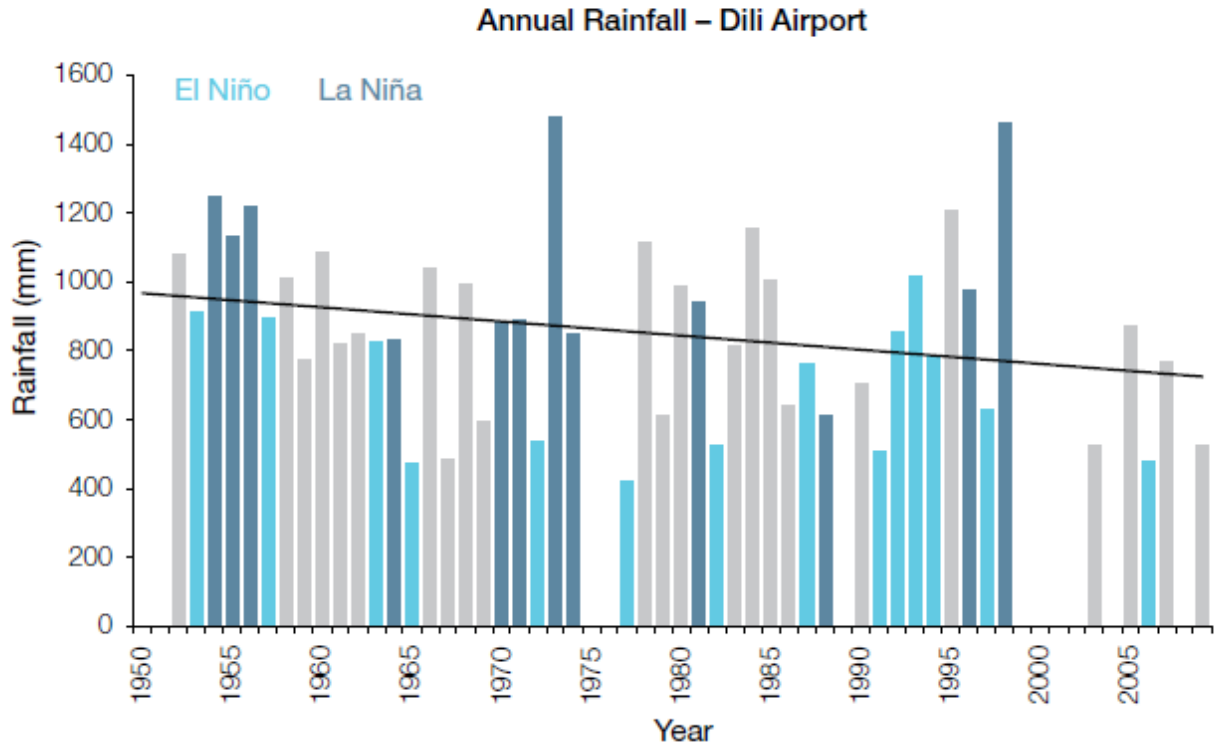


Key Climate Risks...cont

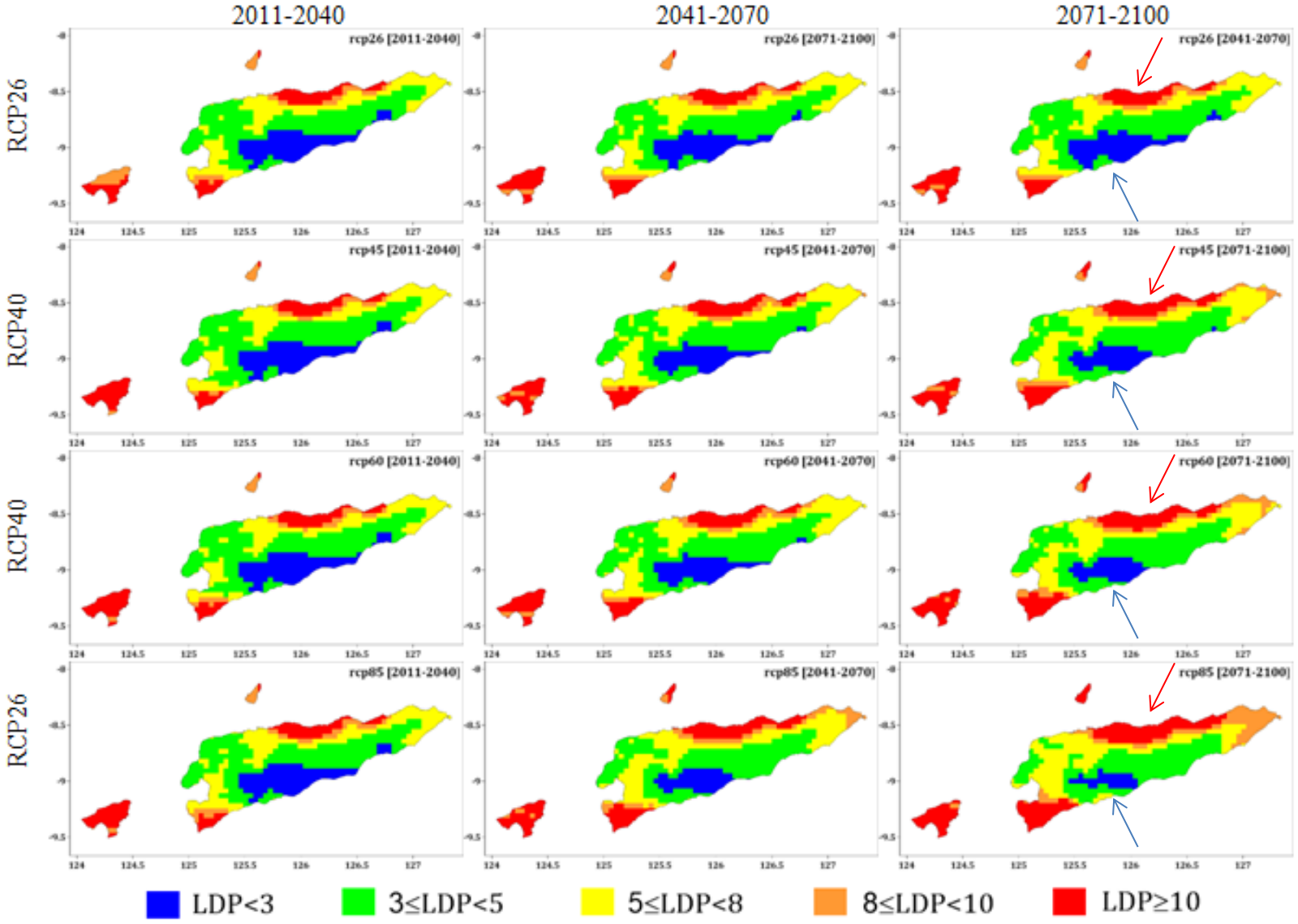
- annual mean temperature has increased about 0.016°C per year and it is very likely to increase up to 1°C 2040 an 3°C by 2100
- sea level has risen at about 5.5mm-9.0mm/year and will continue increase which threaten coastal infrastructure and cities

Key Climate Risks…cont

- According to PCCSP (2011), main annual rainfall in Dili has decreased from 1950-2005



Period of Water Deficit under Future Climate, (INC, 2014)



Key Climate Risks…cont

- Decreases in rainfall are projected in some parts of the country, as well as changes in its seasonal distribution (INC, 2014)
- the drier area on the northern coast of the country will expand in the future
- Potential areas for the establishment of new agricultural areas (expansion) will become more limited
- Increasing cropping intensity will be more difficult without supporting irrigation water
- In some areas of the north coast of Timor-Leste, even planting crops once a year is not possible
- Water scarcity will become more serious in the future particularly in those areas with a longer water

III. Adaptation Projects and Activities

- NAPA implementation Project on Food Security and Agriculture is now implemented by MAF funded by the EU/ IFAT (USD 4,000,000).

- NAPA implementation project called SSRI implemented by UNDP, executed by MSA financed by GEF/LDCF under the UNFCCC (USD 4,600,000).

- NAPA implementation project on Disaster Risk Reduction (Dili-Ainaro Corridor) is now undergoing and is implemented by UNDP and executed by MSS financiered by GEF/LDCF-UNFCCC, USD 5,250,000.

- NAPA implementation project (Manatuto-Natarbora Corridor) to be started soon with financial support from the GEF-LDCF-UNFCCC (USD 4,500,000) implemented by the ADB.

- NAPA implementation on Mangrove and coastal zone mgt. USD 7,000,000 from the GEF/LDCF implemented by UNDP.

Adaptation Projects...cont

- CBA project for NAPA implementation project financed by AUSAID : 1,700,000 USD, implemented by OXFAM, CRS, CARE under the leadership of CONSORSIUM

- NAPA implementation Project on CBA financed the EU: USD 203,000 implemented by the USP and SEMA in Liquiça, Manatuto and Baucau mainly supporting water supply for rural communities.

- The EU has allocated USD 4,000,000 for forestry, agriculture and land use information system as well rural adaptation activities that is being implemented by the GIZ and Camoes Institution.

- In 2014, EU-GIZ adapting to cc and sustainable energy (ACSE) has allocated 1,000,000 USD for funding 2 project: securing clean water for a climate resilience future and **Integrated action for resilience and adaptation (IA4RA) to climate change in the Raumoco Watershed**

- ***Total financial support for NAPA Implementation: 32,253,000 USD compared to the planned fund of 21,300,000 USD***
- Capacity need assessment (EU-GCCA) 30,000 USD (2015)

Adaptation Projects...cont

- Establishment of Center for Climate Change and Biodiversity (CCCB) under the National University of Timor Loro sae to address adaptation research
- Climate change vulnerability assessment for Hera Village and Pantai Kelapa Beach by CCCB financed by the GoTL via MCIE USD 7,000
- Capacity building for adaptation researchers such as climate change analysis and modeling by CCCB with support from the MCIE of USD 2,000
- Coastal zone management project for Dili Capital funded by the GoTL

IV. Monitoring and Evaluation toward NAPA Implementation

- No M&E framework in place for NAPA implementation Projects but channeled via:

1. NAPA implementation updating worshops done by MCIE/NDIEACC
2. Adaptation Working Group's regular Discussions and Conference led by the MCIE/NDIEACC
3. Project base updating information
4. Sharing project reports and project documents led by the Center for Climate Change and Biodiversity (CCCB) under the National University of Timor Lorosae and NDIEACC, including putting information in the website in order to know who is doing what, where and how as well as best practices and lessons learnt

V. A national roadmap for the process to formulate and implement NAP

- NAP will buid upon the NAPA experiences as well as the current climate risks
- PIF of the NAP has been submitted to the GEF Secretariat for its support
- The project needs about 4 millions USD within 4 years
- All related stakeholders and Ministries will be involved in the NAP preparation and implementation

VI. Regulatory Framework for NAP

- Environmental Policy **recognizes the importance of climate change adaptation**
- *Environmental Basic Law, Article 34:*

  *The government should implement the necessary **measures for adaptation**..... **to climate change** in order to..... **minimizing the negative effects of climate change impacts** on biophysical systems and socio-economic*
- National Strategic Development Plan (2011 to 2030) empahsis the **importance of climate change adaptation including NAPA implementation**
- Program of V Constitutional Government(2012-2017): Emphasis **on current CC impacts**, requiring **research on climate change impacts and vulnerability to get data** and seeking forward **to adapt to the impacts of climate change**

VII. Institutional Arrangement for NAP

- The Ministry of Commerce, Industry and Environment (**MCIE**) has been given a **mandate** to **coordinate** climate change related issues
- Under the Ministry, the **NDIEACC** has been **mandated** to address **technical coordination** for **adaptation**, including NAPA and NAP
- The existing **Adaptation Tematic working Group** or **Sectoral Working Groups** will be utilized to **facilitate NAP consultation** processes
- The existing **Interministerial Working Group (led by MCIE**) will facilitate **coordination at political** level
- A M&E framework for the NAP implementation will be created if it is necesary

VIII. **Key components of National Development Planning for prioritizing adaptation efforts**

Build on the existing NAPA and vulnerability, NAP will focus on:

- Agriculture and food Security component
- Water resource component
- Fisheries and coastal zone management
- Livestock production
- Forest and ecosystem component
- Human health component
- Natural disaster and social welfare
- Infrastructure
- Capacity building, education, public awareness

Thank You