Myanmar Climate Change Alliance

GCCA+ THE GLOBAL CLIMATE CHANGE ALLIANCE PLUS INITIATIVE

Funded by the European Union

CLIMATE CHANGE VULNERABILITY ASSESSMENT OF LABUTTA TOWNSHIP AYEYAWADY REGION, MYANMAR, 2016-2050

SCENARIOS FOR RESILIENCE BUILDING

STUDY CONDUCTED BY

UN-HABITAT

IN COLLABORATION WITH

WWF

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Cover Photo: Crossing by boat to Oo Yi Kone village from Labutta ©MCCA/UN-Habitat, 2016
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NOTES ON THE STUDY

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MoNREC/ECD facilitated the cooperation with key national departments, i.e. the General Administration Department (GAD) of the Ministry of Home Affairs, for local consultations; the Department of Population (Ministry of Labour, Immigration and Population), which provided disaggregated 2014 Census data; the Department of Meteorology and Hydrology (DMH) of the Ministry of Transport and Communication (MTC), which provided all necessary data for the downscaled climate change projections.

The World Wide Fund for Nature (WWF) contributed through the ADVANCE Partnership with the Columbia University Center for Climate Systems Research (CCSR) in the downscaled projections as well as the analysis of the eco-system. Reference should be made to main study Horton, R., De Mel, M., Peters, D., Lesk, C., Bartlett, R., Helsingen, H., Bader, D., Capizzi, P., Martin, S. and Rosenzweig, C. 2017. *Assessing Climate Risk in Myanmar: Technical Report*. New York, NY, USA: CCSR at Columbia University, WWF-US and WWF-Myanmar.

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SCENARIOS FOR RESILIENCE BUILDING

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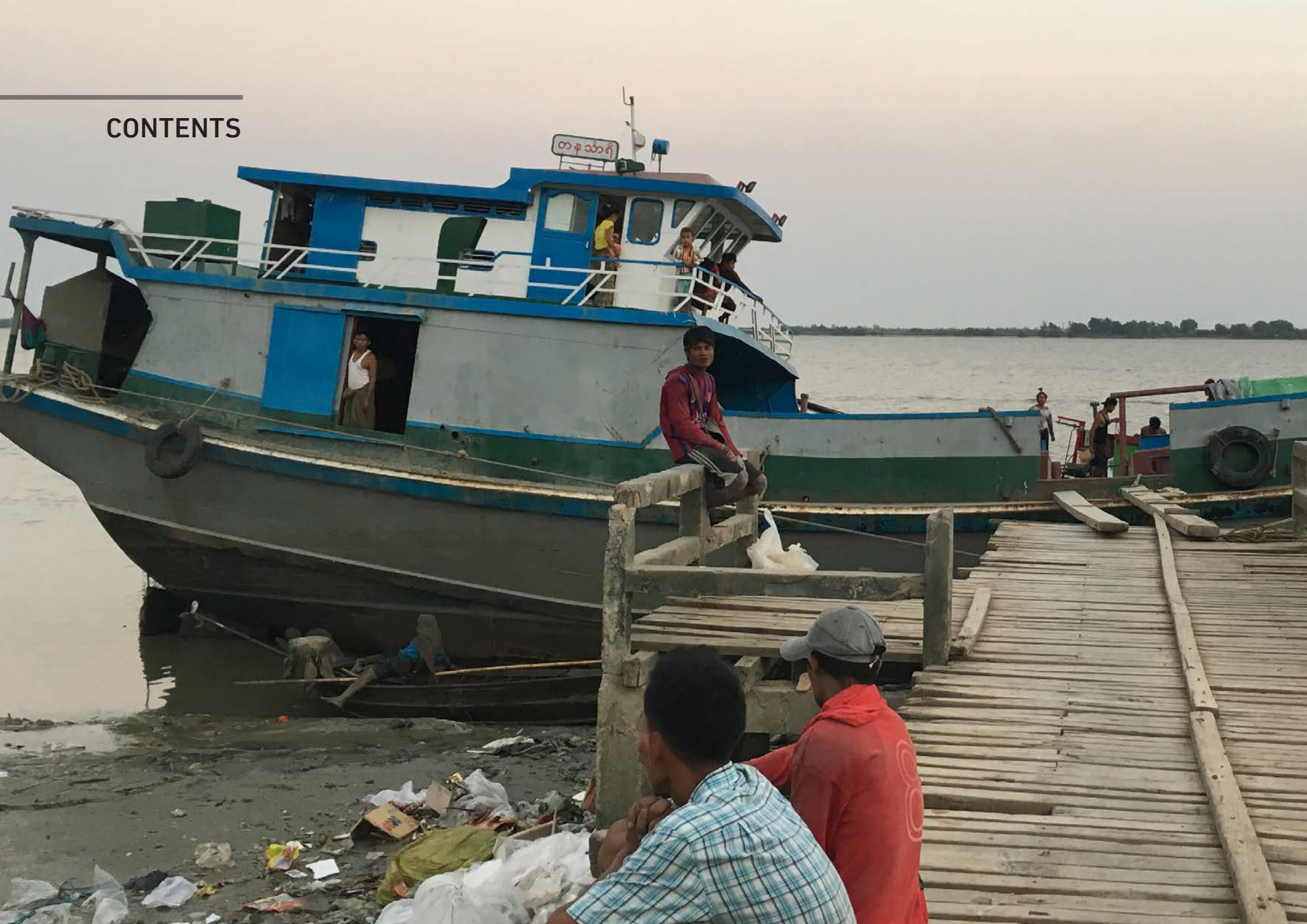

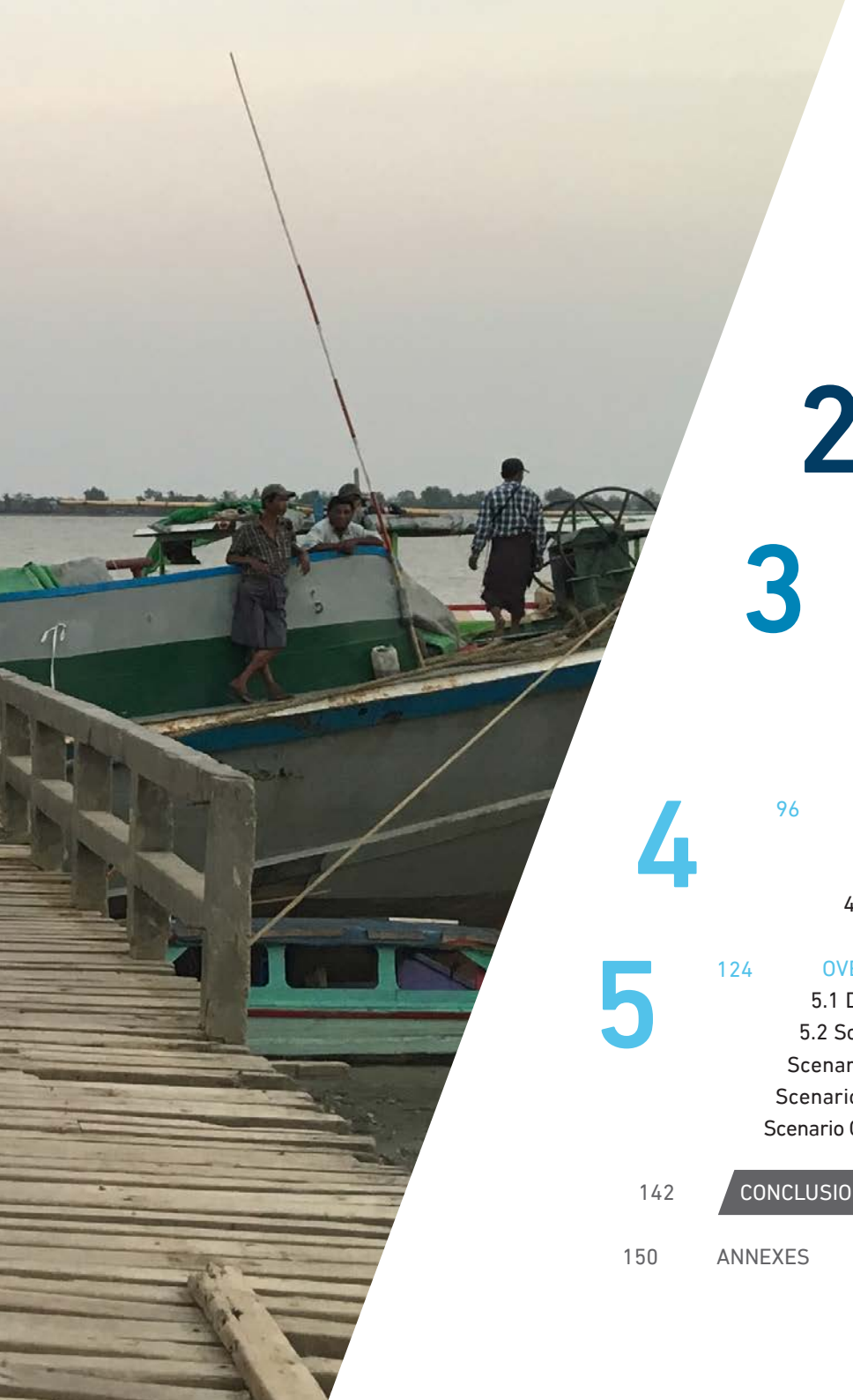

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EXECUTIVE SUMMARY

This assessment analyzes the vulnerability of the ecological, infrastructure and socio-economic conditions of Labutta in relation to the present and projected climatic conditions. It concludes that vulnerabilities in Labutta are currently high and that changes in climate will require decision-makers in Labutta Township to plan for increased coastal flooding, warmer temperatures, more frequent extreme heat days, greater amounts of rain within a shorter monsoon season, salinization of water sources and agricultural land, and erratic rainfall patterns during other seasons. Based on these findings, required actions for building

In 2016 the Myanmar Climate Change Alliance, comprised of UN-Habitat, UN-Environment and the Ministry of Natural Resources and Environmental Conservation, in collaboration with WWF and Columbia University conducted a detailed climate change vulnerability assessment of Labutta Township. Labutta is located at the southern tip of the Ayeyawady Delta Area region in Myanmar and is home to around 315,000 people. Characterized by a deltaic environment, it has a predominantly flat topography, and suffered greatly in terms of damage and lives lost from Cyclone Nargis in 2008. Labutta is still struggling to recover from its effects, especially in rice production.

The study analyses current vulnerabilities, and by projecting changes in climate, anticipates further vulnerabilities in the future up to 2050. On this basis, it proposes scenarios that describe potential impact of climate change, and issues recommendations for adaptation to avoid the worst case future scenario. It also describes the expected outcomes and results, and prioritized activities that communities identified during the course of the assessment.