



ASIA Focus: Inclusive financing for water

Wednesday 28 August | 11:00-12:30 Room: M6

Bankable Water Solutions for Food and Beverage Companies in Myanmar

WHAT MAKES THE AYEYARWADY RIVER UNIQUE?

A BIG RIVER

- Length **2170 km**
- Area **413,710 km²**
- 91% lies in Myanmar, 5% in China, 4% in India

THE BASIN

- The ARB (Ayeayarwady River Basin) is the **largest** and **most economically significant** river in Myanmar
- It covers **61%** of the country's landmass.
- 5 of Myanmar's largest cities are in the basin

THIS HUGE RIVER
COVERS AN AREA
10% LARGER
THAN GERMANY

34 MILLION
PEOPLE LIVE IN
THE RIVER'S BASIN

PEOPLE

- The basin is **home to 66% of Myanmar's population** (34 million people)
- On average, there is **79 people per km²** living in the basin
- The majority of these people live in the Ayeayarwady's **agricultural heartlands**, the **dry zone** and the **delta** - particularly in Yangon and Mandalay



BIODIVERSITY

- One of the **most biologically diverse** regions in the world
- around **1,400** mammal, bird and reptile species
- **More than 100** of these species are globally threatened
- **388** identified species of fish
- **50%** of these fish **endemic** to the Ayeayarwady River
- Each time the river is surveyed, **new species** are discovered

NEW SPECIES
ARE DISCOVERED
EVERY TIME
THE RIVER IS SURVEYED

SERVICES PROVIDED
BY THE RIVER CONTRIBUTE
2-6 BILLION USD
TO MYANMAR'S ECONOMY
EVERY YEAR

MYANMAR'S LARGEST
CITIES ARE IN THE
AYEYARWADY BASIN

 Monywa	 Mandalay
 Patheingyi	 Yangon
 NayPyi Daw	

UNIQUE NATURAL DYNAMICS

The natural dynamics of the Ayeayarwady, particularly its sediment dynamics, are of particular interest. The Ayeayarwady is the **22nd largest river in the world** in terms of water discharge, however it carries the fifth largest suspended sediment load annually.

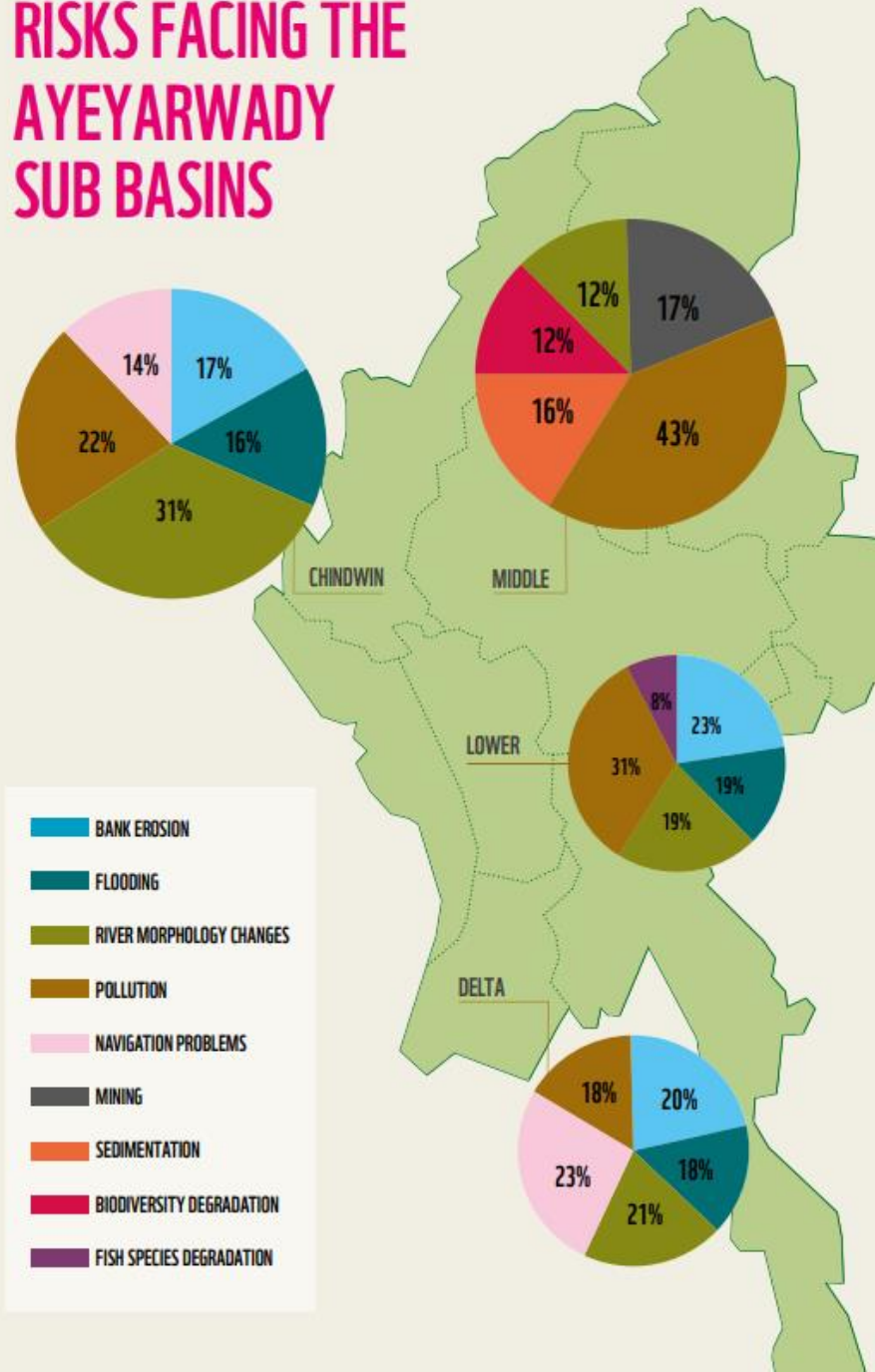
THE SEDIMENT LIFELINE

Between 261 and 354 million tons per year of suspended sediment coarse through the Ayeayarwady's waters every year. **This sand, stone and rock are a lifeline and the main enabler of the Ayeayarwady's nutrient rich delta**, which is home to the largest concentration of people, fish and fields of rice paddies in the country.

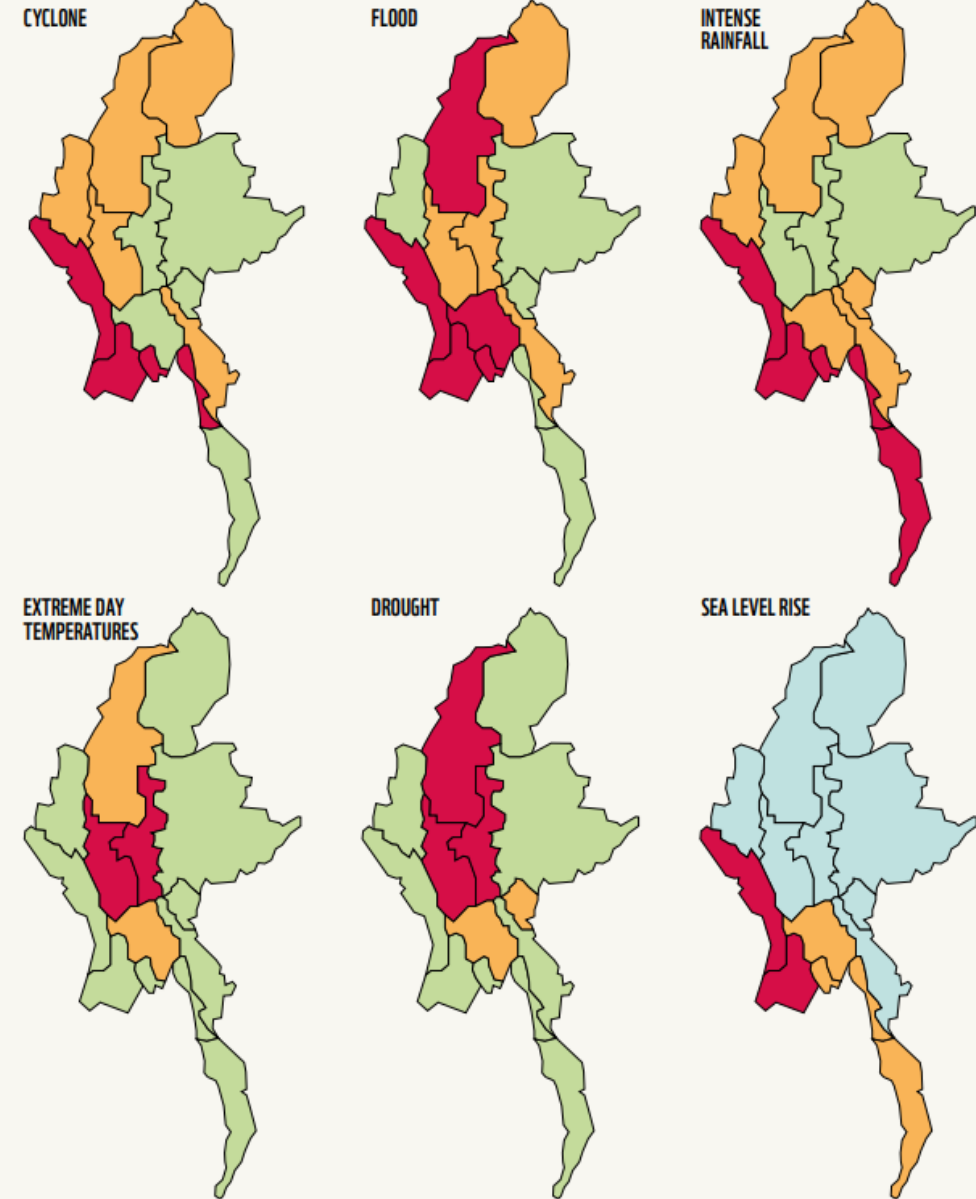
INVALUABLE SERVICES

The river has many **other natural dynamics or ecosystem services** including provisioning, regulating and supporting cultural services that take place in the Ayeayarwady Basin, supporting irrigation, inland water transport, fisheries, aquaculture, potable water supply, biodiversity, and ecotourism. These **were recently quantified in the State of the Basin Report (2018) to be worth 2-7 billion USD a year**. These ecosystem services equate to between **6% and 16% of GDP per capita in Myanmar**. Additional significant values not calculated include the value of hydropower as well as positive and negative impacts of floods on the river system and ecosystem services. **This document attempts to further identify what values these ecosystem services provide towards the economy and society of Myanmar.**

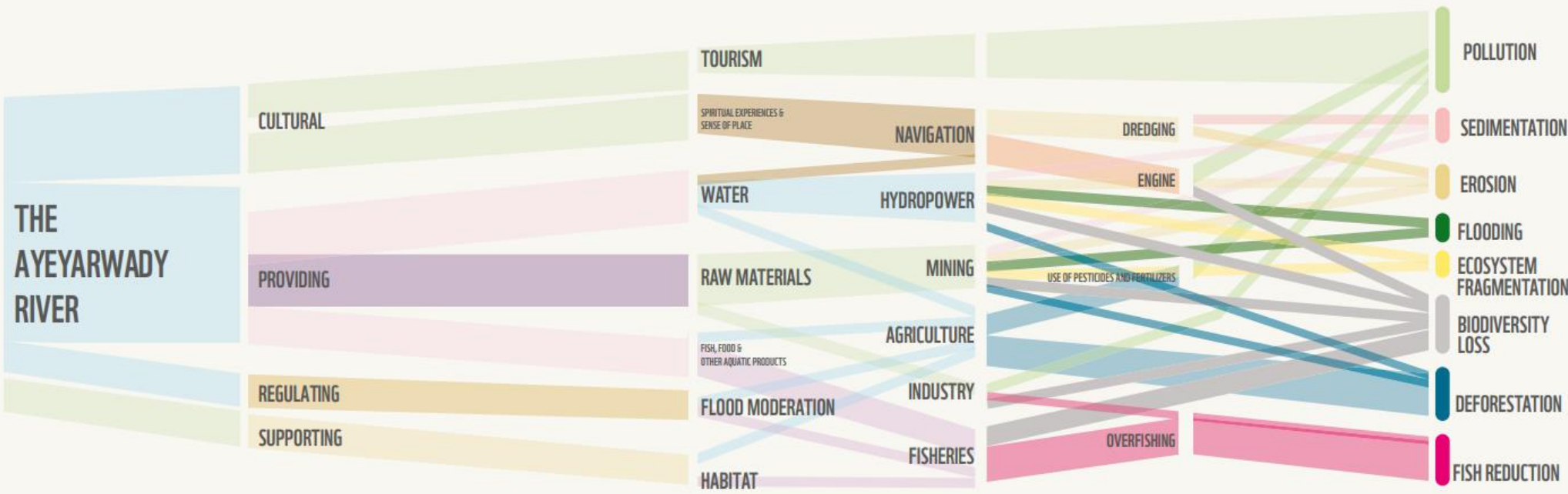
RISKS FACING THE AYEYARWADY SUB BASINS



WHAT AND WHERE ARE THE CLIMATE CHANGE RISKS FACING MYANMAR?



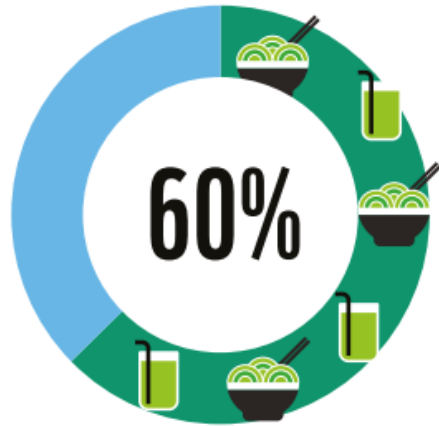
HOW DO DIFFERENT SECTORS DEPEND ON THE AYEYARWADY?



AND WHAT ARE THE IMPACTS?



Food and Beverage Industry



60% of companies in Myanmar are Food & Beverage producers

(27,113 registered factories nationwide)



Less than 5% have functioning waste water treatment



Food and Beverage companies in Myanmar are one of the largest consumers and polluters of water and energy



89% of the country's Food and Beverage companies are small and medium-sized enterprises (SMEs)



Tha Bar Wa

A sustainable future for industry

This project promotes cleaner production in food and beverage industry by promoting:

- 1 Wastewater treatment plants
- 2 Energy efficiency
- 3 Renewable energy



Cleaner Production Solutions

It supports factories to design, finance and implement cleaner production solutions.



Technical Skills

It builds technical skills and know-how of local experts on cleaner production



Develops a roadmap

It works with the government to develop a roadmap for cleaner production guidelines



Financial Products

It supports financial institutions to offer banking products designed specifically for cleaner productions

Myanmar Flats Industrial Waste Water Treatment

Pre-feasibility study



FMO will provide seed funding to promote green technologies for industrial wastewater treatment and identify innovative investment options to improve the treatment of industrial wastewater and reduce the discharge of pollutants in the Irrawaddy river basin.





Tha Bar Wa

A sustainable future for industry

OUR PARTNERS:



MFPEA

Myanmar Food Processors &
Exporters Association



Finanzgruppe

Sparkassenstiftung für
internationale Kooperation

OUR DONOR:

switchasia
Sustainable Consumption & Production Facility



Funded by the
European Union





WWF

REPORT

MM

2018

THE AYEYARWADY RIVER AND THE ECONOMY OF MYANMAR

VOLUME 1: RISKS AND OPPORTUNITIES FROM THE
PERSPECTIVE OF PEOPLE LIVING AND WORKING IN THE
BASIN



CHALLENGES

PROJECTS

FROM THE FIELD

ABOUT US



"Cleaner production: a sustainable future for industry"

PROJECT: THA BAR WA

Tha Bar Wa

Catalysing sustainable water and energy
management in Food and Beverage Industries in
the Ayeyarwady River Basin

<http://www.wwf.org.mm/en/thabarwa/>





Bankable Water Solutions

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https://wwf.panda.org/our_work/water/bankable_projects/

