



The 5th Meeting of the Regional Scientific and Technical Committee
For Establishment and Operation of a Regional System of Fisheries Refugia in the South China Sea and Gulf of Thailand,
16 – 17 March 2022, 08:30-12:00 (GMT+7), Virtual Meeting

AGENDA 8.1

INDICATORS FOR SUSTAINABLE MANAGEMENT OF FISHERIES REFUGIA

PCU

Reference: WP.8.1

WHAT IS AN INDICATOR?

- ❖ Indicators play an essential part in the communication of scientific results to decision- makers.
- ❖ Countries develop indicators to support effective decision-making and policy-setting



Indicators are defined based on target objectives and goals

THE WORLD DEVELOPMENT INDICATORS (WDI-WORLD BANK)

POVERTY AND INEQUALITY	PEOPLE	ENVIRONMENT	ECONOMY	STATES AND MARKETS	GLOBAL LINKS
poverty, prosperity, consumption, income distribution	population dynamics, education, labor, health, gender	agriculture, climate change, energy, biodiversity, water, sanitation	growth, economic structure, income and savings, trade, labor productivity	business, stock markets, military, communications, transport, technology	debt, trade, aid dependency, refugee, tourism, migration



DEVELOPMENT INDICATORS

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY
6 CLEAN WATER AND SANITATION	7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES
11 SUSTAINABLE CITIES AND COMMUNITIES	THE GLOBAL GOALS For Sustainable Development			12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE AND JUSTICE STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS

UN SUSTAINABLE DEVELOPMENT GOALS

Develop a global partnership for development	Eradicate extreme poverty and hunger	Achieve universal primary education
	2015 MILLENNIUM DEVELOPMENT GOALS	
Ensure environmental sustainability		Promote gender equality and empower women
Combat HIV/AIDS, malaria and other diseases	Improve maternal health	Reduce child mortality

MILLENNIUM DEVELOPMENT GOALS

IN FISHERIES ASPECTS

FAO (1999) stated that

Indicators aim to enhance communication, transparency, effectiveness, and accountability in natural resource management towards

SUSTAINABLE DEVELOPMENT

Indicators assist in the process of assessing the performance of fisheries policies and management at global, regional, national, and sub-national levels.

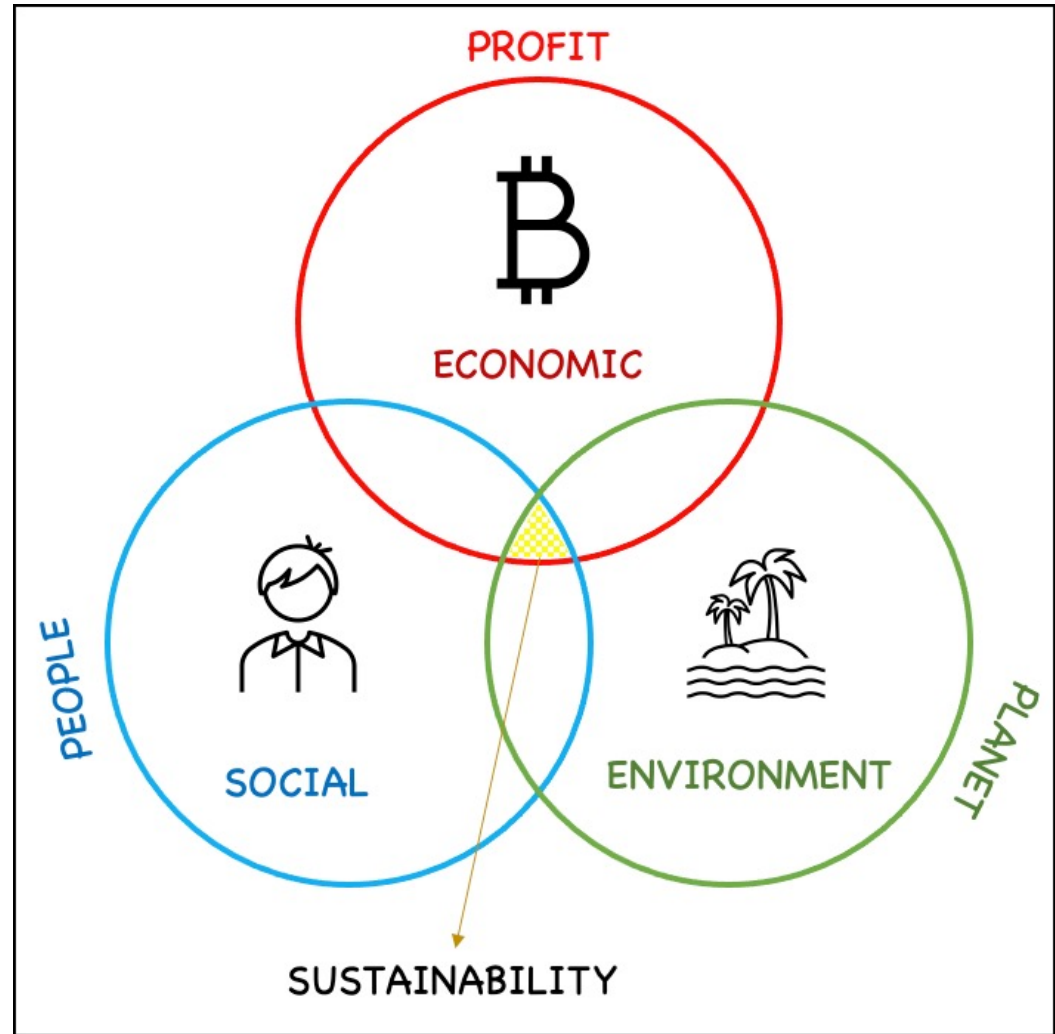
SUSTAINABLE DEVELOPMENT CONCEPT

(Elkinton, 1997)

FAO: In't Guidelines on indicators for sustainable development of marine capture fisheries adopted in 1999.



ASEAN-SEAFDEC: Regional Guidelines in 2006



DEVELOPMENT OF FISHERIES REFUGIA INDICATORS

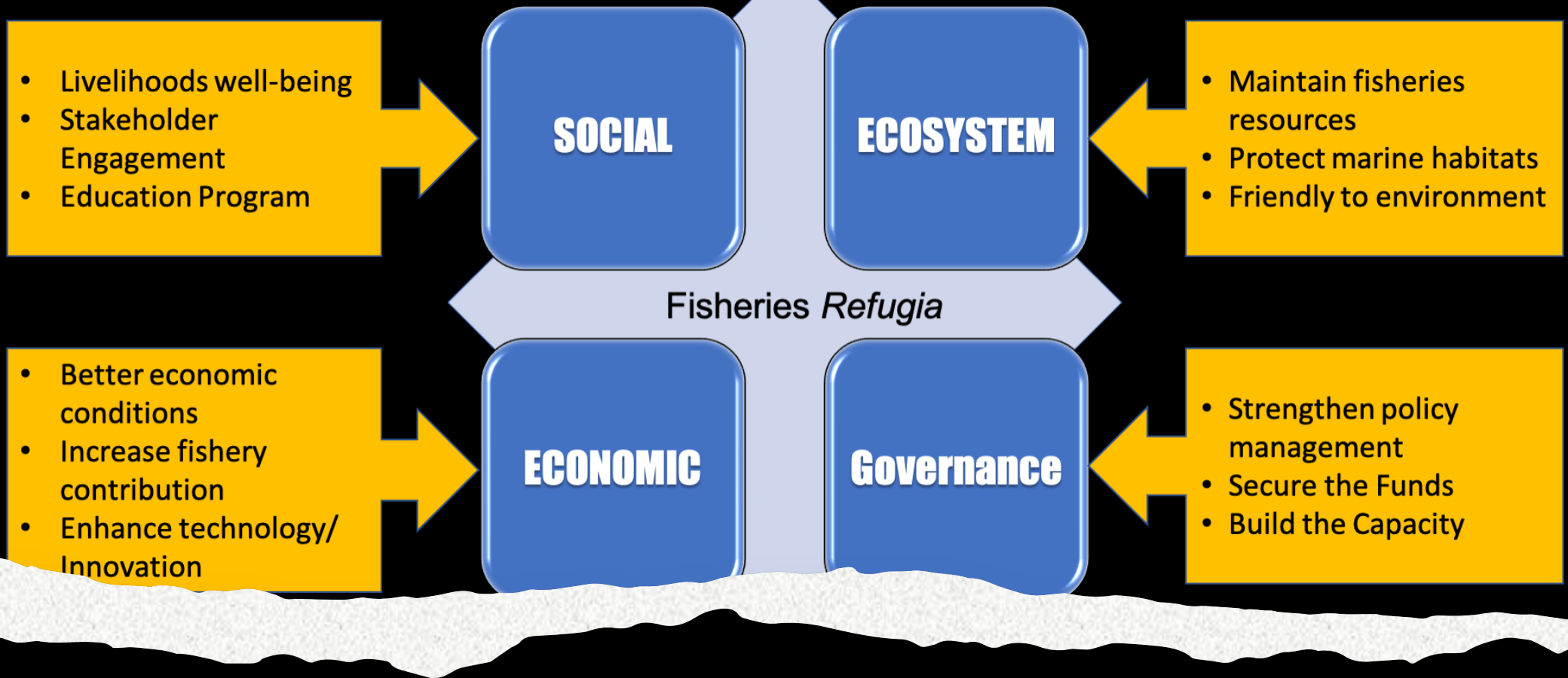
- Regional Experts in September 2019;



LONG-TERM OBJECTIVES

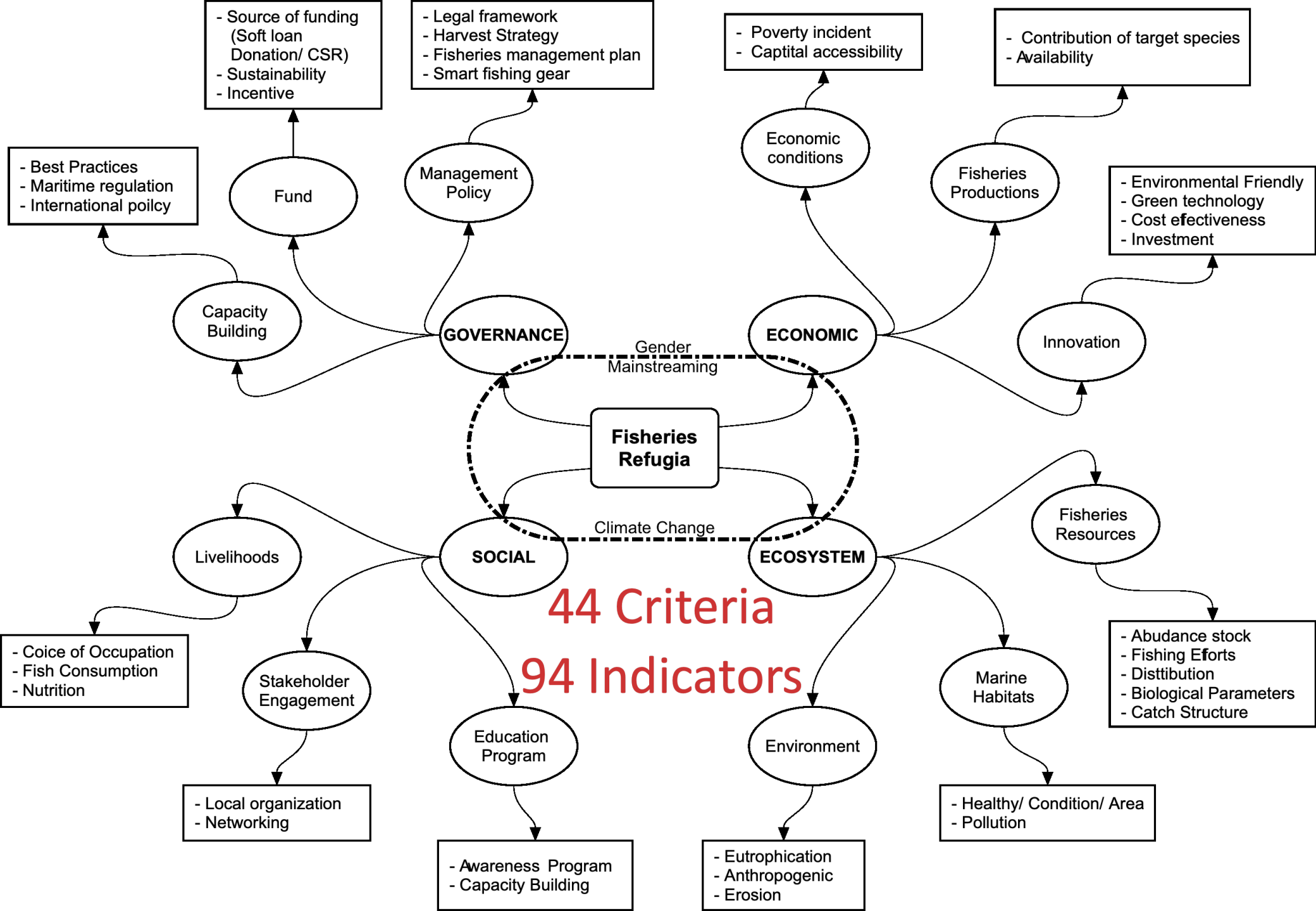
- Maintain the fish stock and critical habitats:
- Satisfy fishing community, social needs now and futures:
- Put in place an effective management system





A STRUCTURAL FRAMEWORK

- 4 dimensions
- 12 Targets / sub dimensions



CONTENTS

CHAPTER 1: INTRODUCTION	6
1.1 IMPORTANCE OF INDICATORS.....	6
1.2 SUSTAINABLE DEVELOPMENT CONCEPT AND FISHERIES SUSTAINABILITY	6
1.3 INDICATORS FOR FISHERIES SUSTAINABILITY	8
CHAPTER 2: UNDERSTANDING FISHERIES REFUGIA CONCEPT	9
2.1 NATURE OF FISHERIES AND ADAPTIVE MANAGEMENT NEEDS	9
2.2 COMPARISON WITH OTHER ECOSYSTEM APPROACHES	9
2.3 FISHERIES REFUGIA CONCEPT	10
CHAPTER 3: INDICATORS FOR MANAGING FISHERIES REFUGIA	13
3.1. LONG-TERM OBJECTIVES	13
3.2. DEVELOPING THE FRAMEWORK	13
3.3 SPECIFYING CRITERIA AND INDICATORS	15
CHAPTER 4: GLOSSARY	31
ACKNOWLEDGEMENTS	33
REFERENCES	33

ACTIONS BY THE COMMITTEE (RSTC5)

- Committee is requested to note and consider the 1st draft of Indicators for Sustainable Management of Fisheries Refugia based on the agreed indicators from the Regional Expert Consultation in September 2019;
- Committee is also invited to provide technical comments on the 1st draft of Indicators for Sustainable Fisheries Refugia and adopt the paper as amendments by the RSTC5 or as It is.
- The final paper from RSTC5 will be addressed to the forth coming Project Steering Committee in May 2022 (tentatively) for approval and publishing.