



EAFM FRAMEWORKS

In Australia and the Pacific Region

Overview and Lessons Learned

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OUTLINE

- Overview of EAFM
- Outline the basic framework
- Describe the tricks learned to assist successful implementation in ALL circumstances

What do all the Different Ecosystem Approaches mean?

Integrated Ocean Management - IOM

- All the variations on this theme of taking a

Ecosystem Approach to Management -

Ecosystem Based Fisheries Management

Ecologically Sustainable

Ecosystem Based Management -

Thus, the defining element of EBFM is that it is restricted to what can be managed or influenced by a fisheries agency – hence the “F”

EAFM Measurement and Reporting

- Many previous attempts failed because one size does not fit all
- It requires a **process** to systematically identify important issues, develop objectives and what indicators to measure and what management arrangements are needed
- Using and refining our system since 2001

Systems Already Assessed

- Over 30 fisheries in WA
- About 20 fisheries across other parts of Australia
- The WCPO Tuna Commission
- Plus, the Tuna management plans for many member countries of the WCPFC
- Case studies on various Pacific countries, coastal fisheries and communities.
- Aquaculture industries in WA, South Australia and Tasmania

Summary of EAFM Process

STEP 1 defines what is to be covered by the EAFM

1. Determine scope
2. Identify and agree on issues/values/operational objectives

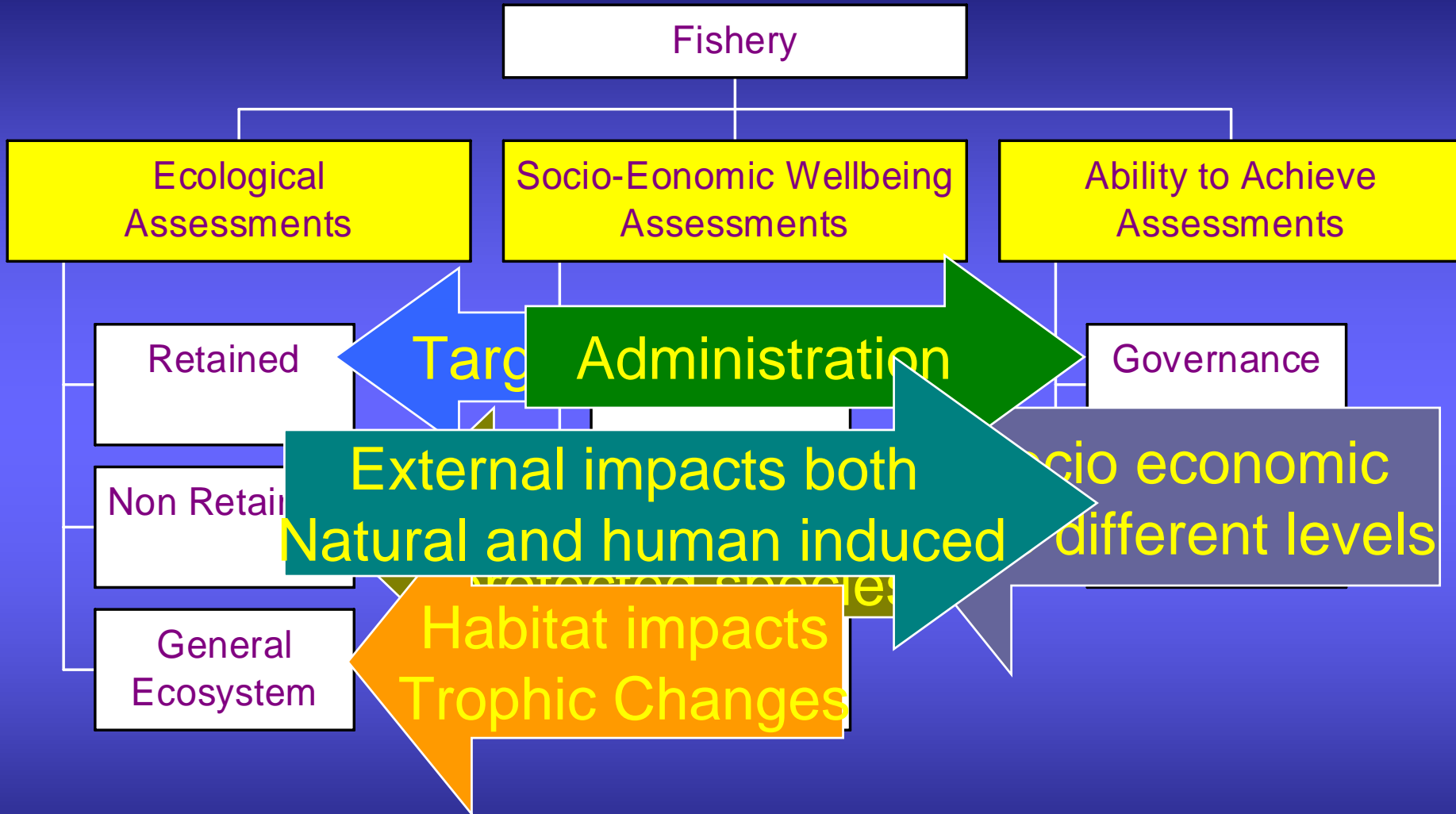
3. Consider the following questions:
 - This can be an individual fishery
 - All fisheries in a region,
 - A region or even an entire country
4. Develop a management plan to achieve agreed objectives
 - IT IS VITAL THAT THIS IS CLEARLY DETERMINED and AGREED!

BECAUSE THIS DEFINES HOW THE REST OF THE PROCESS OPERATES

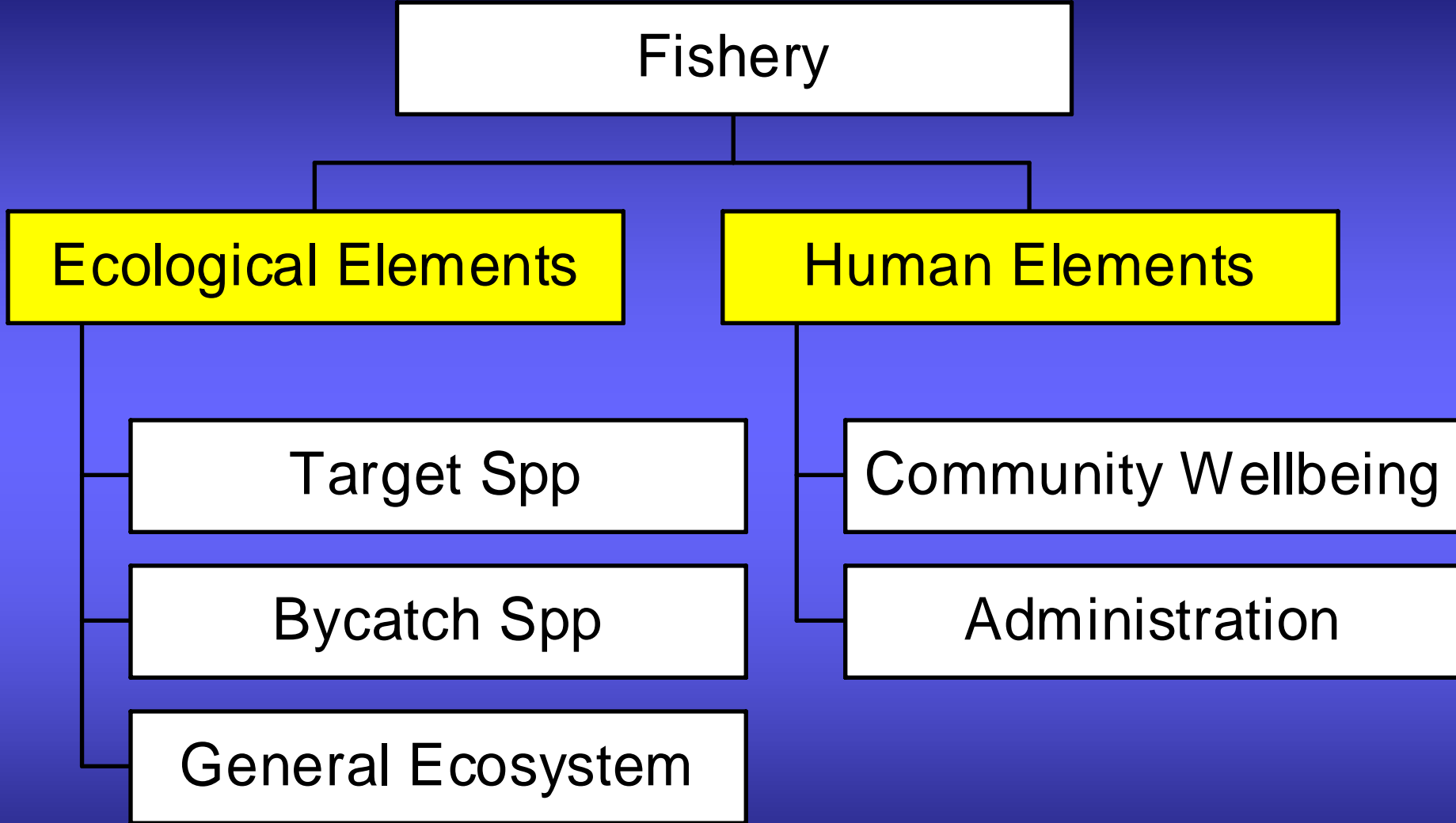
OVERVIEW

- The four steps are the basis of ALL assessments – whether it is an isolated atoll community or a million tonne fishery
- BUT – the details of how you complete these four steps MUST fit the situation.
- We have learned a number of lessons to assist with this.

National ESD REPORTING FRAMEWORK



Separates ESD into 8 main components across 3 categories

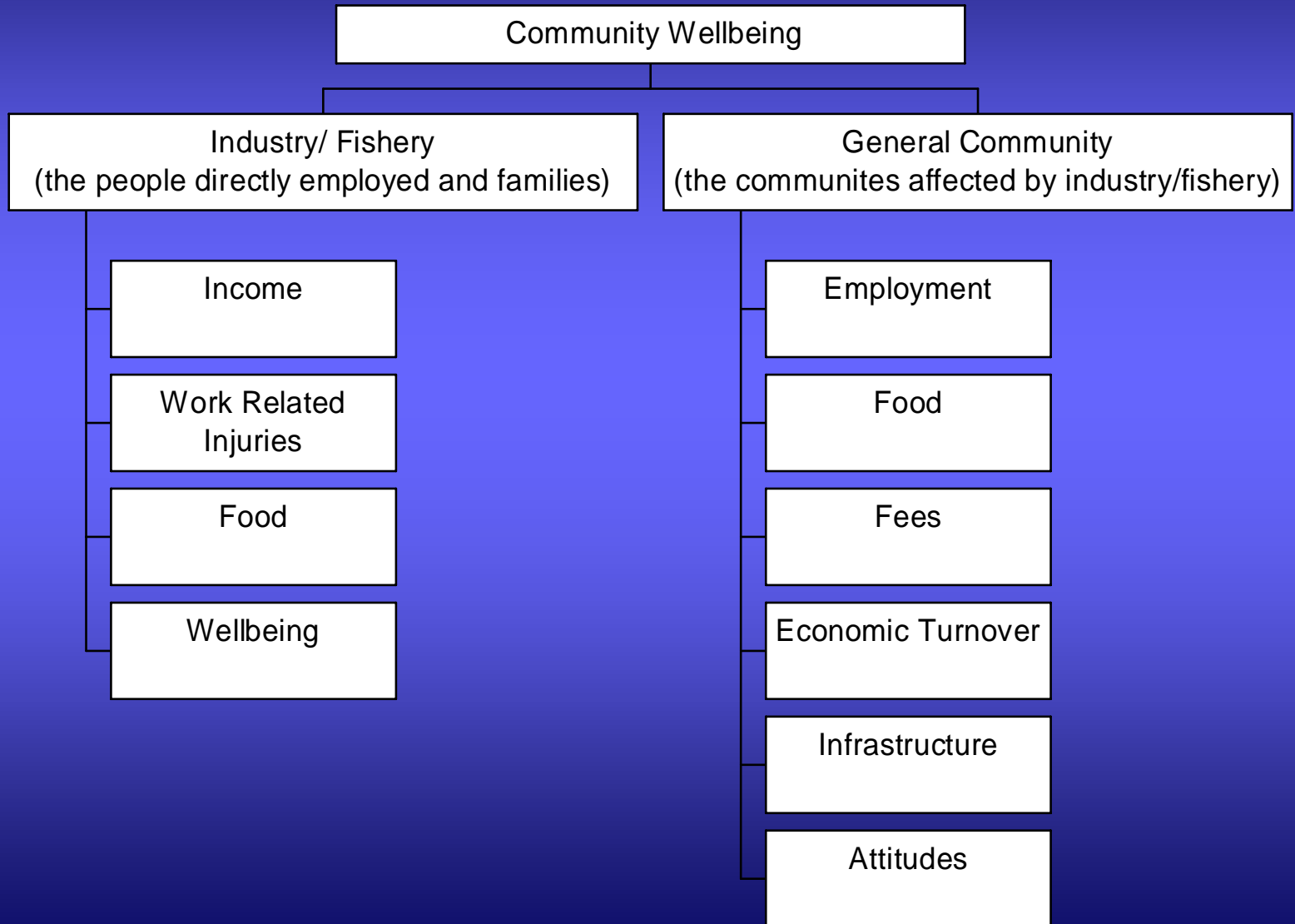


Getting Engagement

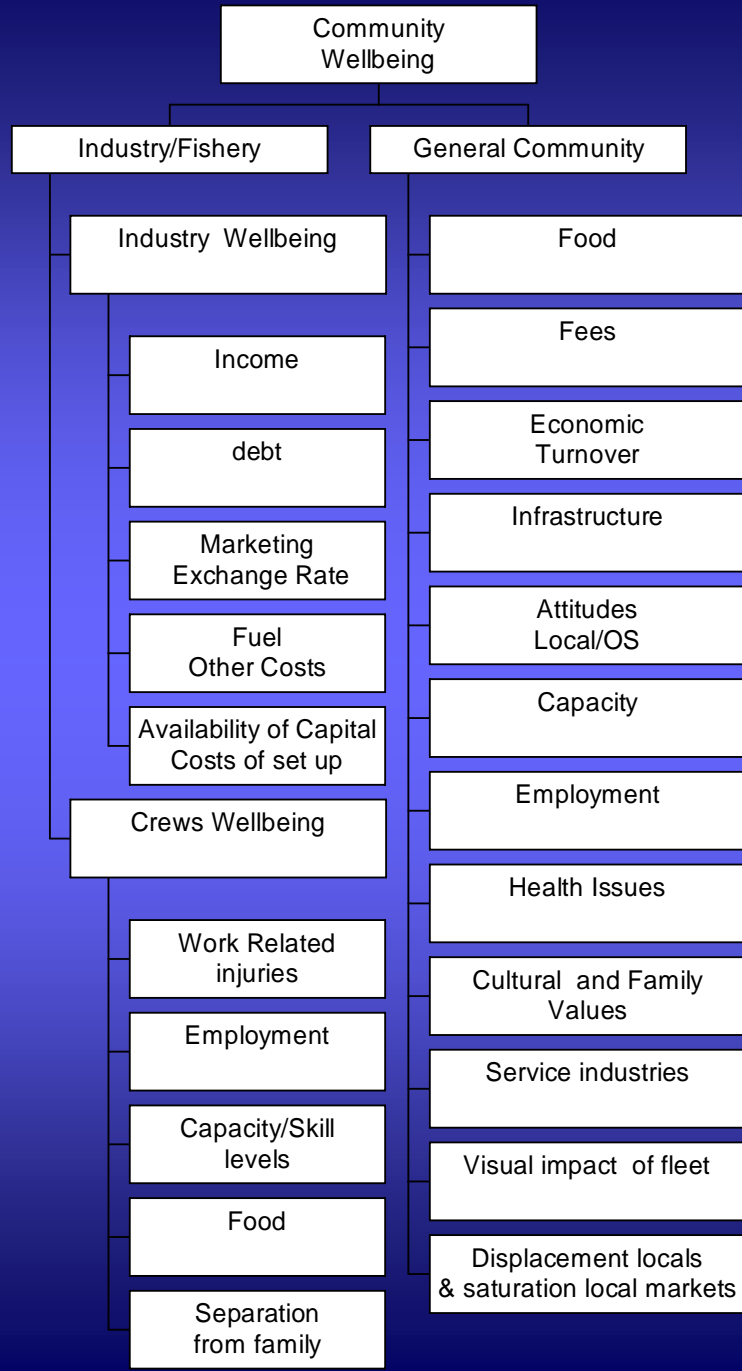
- The less industrial the fishery – the more you need to begin by identifying the community wellbeing issues FIRST (not the ecological issues).
- This helps decide what values they want to achieve from their resources.
- Don't impose YOUR values on them.

COMMUNITY WELLBEING

Contribution of the Fishery/Industry to:



Vanuatu
Tuna
Fisheries
Community
Wellbeing
Issues



STEP 3

- Often many issues are identified and their importance varies.
- Complete a Risk Assessment to determine the appropriate level of response for each issue

STEP 3: PRIORITISATION

Component
Trees
(issues identified)

Risk Assessment



**NO DIRECT
MANAGEMENT NEEDED**

**DIRECT MANAGEMENT
IS NEEDED**

Risk And Objectives

WHAT/WHOSE values/objectives are to be assessed?

The risk level may change depending upon what objectives/values are used.

You may also need to separate overall risk from that generated by a specific fishery/region.

Need to use the appropriate type of risk analysis methods for the situation (we use 3 different versions)

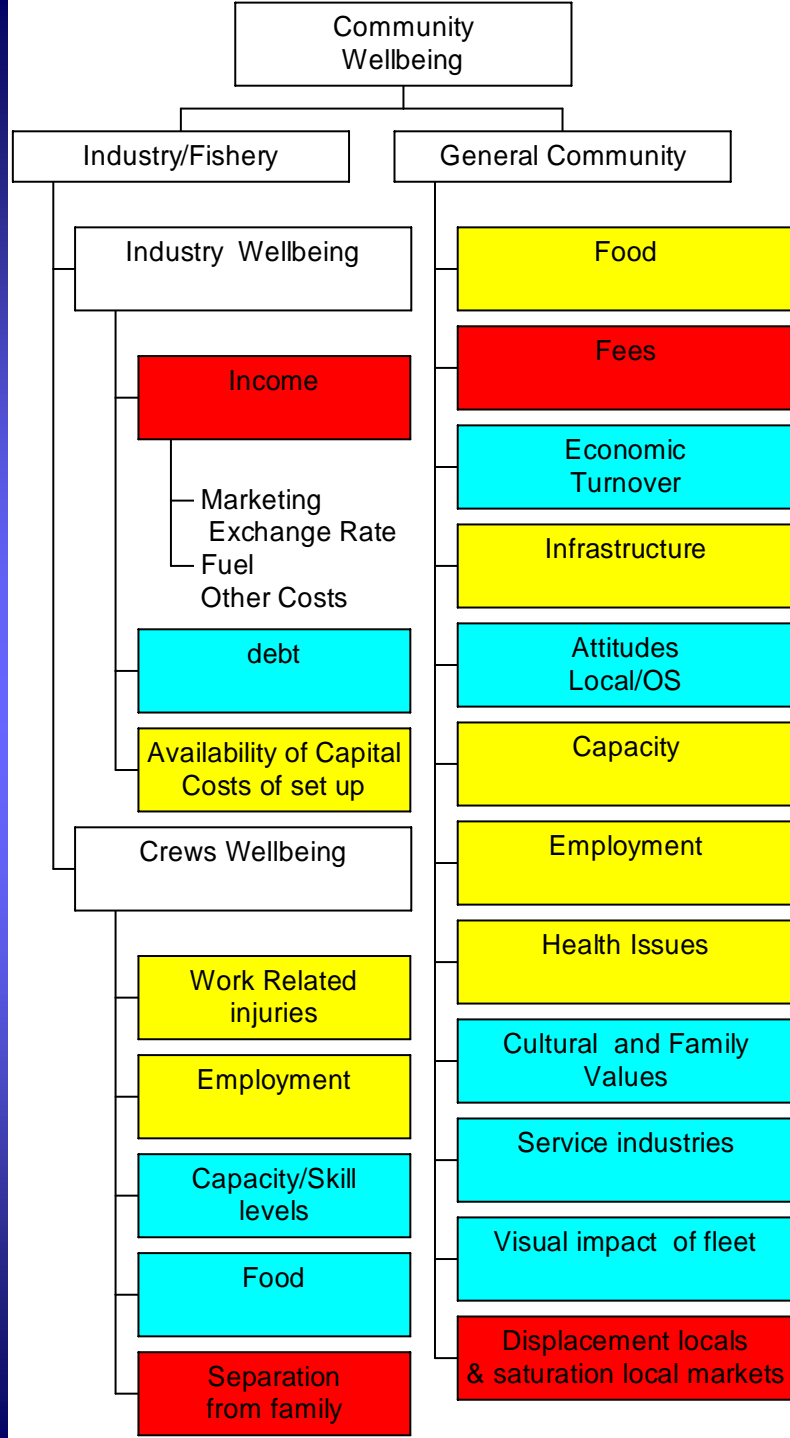
EAFM VALUES in PACIFIC

- Sustainability – keeping biomass levels above B_{msy}
- Viability – avoiding extinction for a species (i.e. $B_{current}$ can be $< B_{msy}$ but $> B_{extinct}$)
- Economic – optimise/maximise economic benefits
- Social - optimise social acceptability
- Food Security – ensure subsistence levels of capture

Risk Outcomes

ALBACORE	Stock sustainability (whole of stock) Economic <i>-Industrial</i> Social <i>-Artisanal</i>	Low Medium High
YELLOW FIN	Stock sustainability <i>- Whole of Stock</i> <i>- Vanuatu Impact</i> Economic- <i>-Industrial</i> <i>-Charter</i> Social <i>-Artisanal</i>	High Low Low Medium Low

Management will mostly focus on ensuring the local density of Albacore remains at sufficiently high levels to ensure viable economic and social outcomes



High	
Medium	
Low	

PART 4 – Management Systems

- Rationale for Management System
- Operational Objectives
- **THESE THREE** Indicators
- Performance Measures (+Justification)
- Data Requirements and Availability
- Evaluation
- Management Responses
 - *Current,*
 - *Future and*
 - *if Trigger is reached*
- External Drivers

What specifically for this issue for this fishery do you want to achieve and WHY?

These need to link directly to the objectives and PIs (Harvest Strategy)

Issue	Objective	Risk level (Internal)	Indicator	Performance Measure	Immediate Management Actions
Industry Income	Economic	Moderate	Sale price of licenses	Maintain or increase	Trying to get the management settings correct to optimize the income generated by the fishery.
Industry Debt	Economic Social	Low	Not Applicable	-	Not needed at the moment
Crew - Work Related Injuries	Social	Moderate	Deaths or serious injuries	No increase	Continue to enforce the requirement of IMO. Ensure crew have adequate training.
Crew - Separation from families	Social	High	Number of complaints from wives	No increase	Education of fishers about the issues and implications of extended trips – cherish family values. Encourage them to take shorter trips.
Crew – Employment and Capacity	Social	Moderate	Percentage of ni-Vanuatu crew on Tuna vessels	Increasing trend	License condition to employ certified local crew on domestic vessels. Encourage locals to go to Vanuatu maritime college to get appropriate certificates

Conclusions

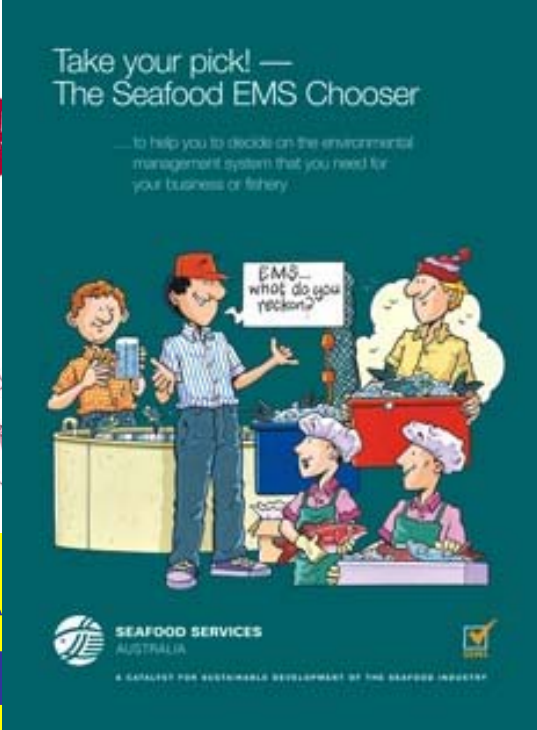
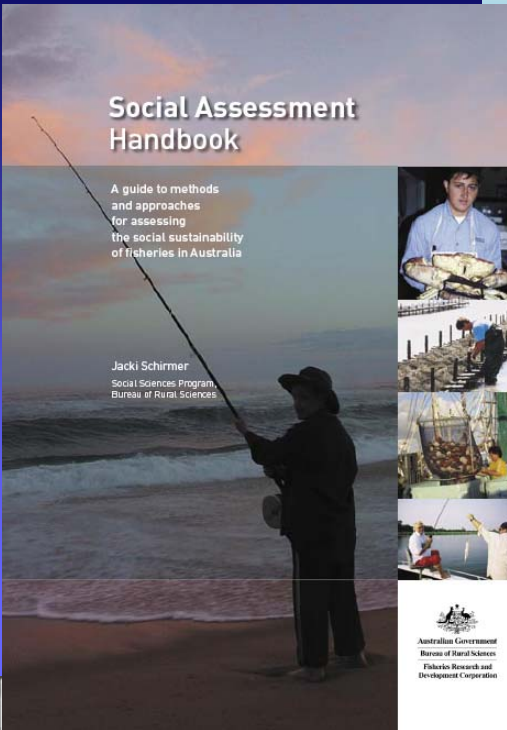
- Recognise that the outputs will often not be perfect in the first instance.
- Very short summary documents can be generated in short time that can cover 80% of the main issues and actions needed.
- Concentrate on what can be delivered not what can't.
- Actual ecosystem issues have NOT been the main problem - despite it being hard to get clarity
- The most common problem are Governance issues – this is not the fault of the framework!

ANOTHER LESSON

- Beware Of Letting Scientists Run The Process!
- This is a management process not a research activity – scientists often make processes and outputs too complicated and focus on the interesting exceptions.
- It must be a pragmatic process otherwise it can bog down in trivia

Final Point

- A key point to remember though, is that the system by itself, like any system, does not provide the answers – it merely assists you in the process.
- The issues and answers must still come from the people involved in the management of the fishery.



REPORTS AND BROCHURES ARE AVAILABLE ON THE SUBPROGRAM WEBSITE www.fisheries-esd.com See Circulated Brochure

