Seagrass:
considerations for use of the
DUGONG & SEAGRASS RESEARCH TOOLKIT

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Aims of the e-Resource Kit

- Encourage user to think through and refine their research question.

- Help user to identify the most appropriate research methods to answer their question.

- Provide guidance on selecting the most appropriate method or tool for their specific circumstance (such as capacity, budget, spatial and temporal scale etc.).

What is the question you are trying to answer?

Resource inventory (supporting dugong populations)
 extent
 abundance (e.g. % cover, biomass, etc)
 species
Level of change (natural vs impacted)
Health (resilience)
Ecosystem services
Threats

What is the environment?

water depth, water clarity, remoteness, etc
social / political

SW Sulawesi Household Survey 2015/16

| VILLAGE_____ DATE_____ RESPONDENT_____ INTERVIEWER_____ |

Respondent background information

1	**Gender**	Male	Female								
2	**Age**	15-18	19-24	25-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71+
3	**Marital Status**	Never married	Married	Separated		Divorced		Widowed			
4	**How many years have you lived in this village?** < 1	2-3	4-6	7-10	11-15	16-20	21-25	25+

Household Characteristics

5	How many families live in your household?	
6	How many people live in your household?	Men _____ Women _____ Children ____
7	Does **any** member of your household own:	Canoe Motorboat Fishing net Bubu Fish fence Other fishing gear
8	What benefits does your household **currently** get from marine and coastal resources?	Income Food Both Other (if so please specify)

Occupation of household members

Consider your methods to reflect the data you need to answer your question

At what scale can you collect <u>meaningful</u> data <u>relevant</u> to your study?

Resource inventory

Scale

Mapping requires different approaches depending on whether survey area is relative to a **region** *(tens of kilometres),* **locality** *(tens of metres to kilometres)* or to a specific **site** *(metres to tens of metres).*

Accuracy

Errors that can occur in the field directly influence the quality of the data.

Monitoring

The level of change and accuracy of the detection will vary according to the methodology.

Explicit objectives

Identified responsibilities (e.g., Gov agencies, consultants, community groups)

Rationale for using parameters (e.g., physico/chemico, biological indicators)

Baseline assessment / measure

Knowledge of spatial and temporal variation
- pilot study

Defined field protocols

Other considerations / challenges

Capacity needed
    standardised methodologies
    skills of personnel (both field + analysis)
    participatory mapping / monitoring (e.g.
    questionnaire or field assistance)
    training (education / capacity building)
    equipment (technology, software, etc)
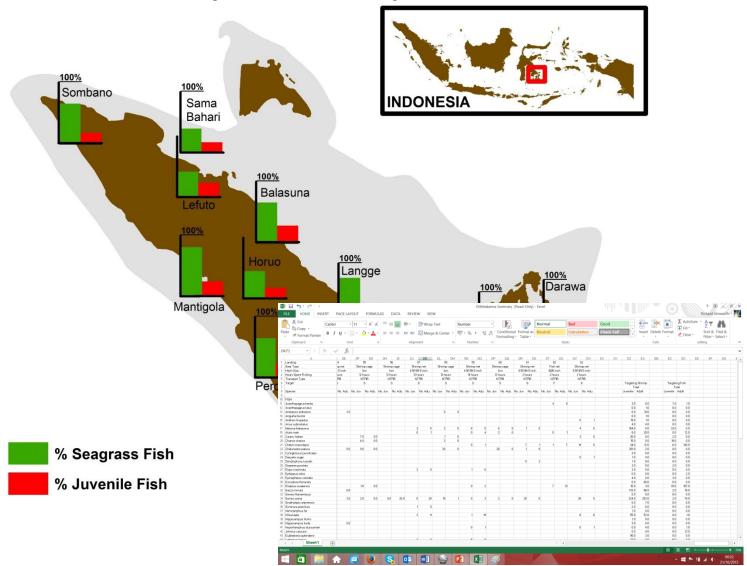
Appropriateness
    Legal / Institutional sensitivities
    Cultural sensitivities (e.g. taboo areas)

Timing / frequency
    time of year (e.g. growing season, weather, etc)

The availability of expertise: data analysis and presentation

% Seagrass Fish
% Juvenile Fish

Other considerations / challenges

Data

Managing errors - a QAQC program

Data management procedures, selection of statistical tools

Data repository (legacy of data)

Usefulness and use of data (e.g. improved decision-making, improved site conservation)

Final thoughts

Beyond linear thinking

How will this lead to a change

For tomorrow:

What do you want to want to know about seagrass in your location?

Please consider this question in advance of tomorrows workshop, in doing so we would like you to think about your approach to answering the question.