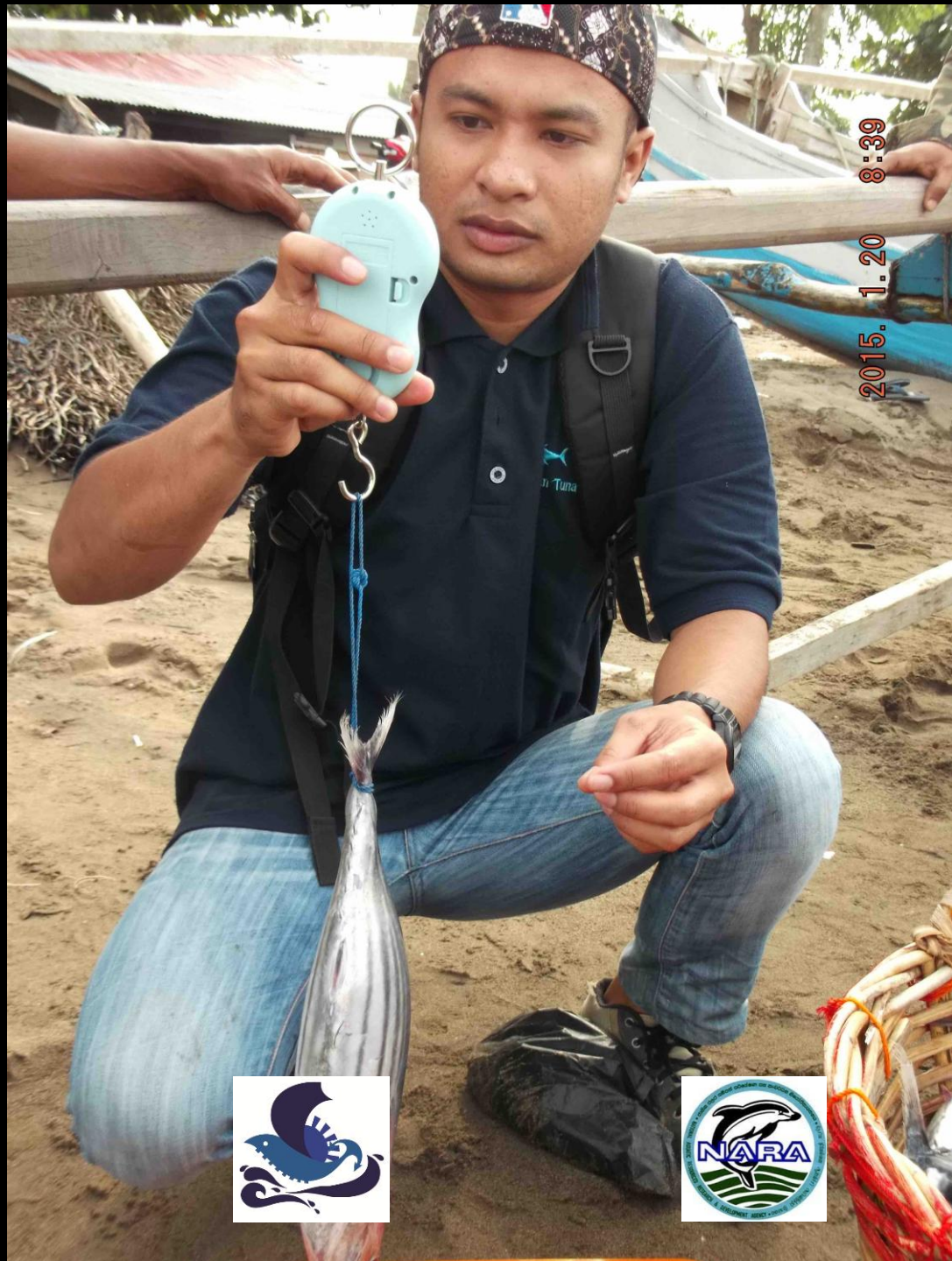
SAMPLING MODULE

WHAT WILL WE COVER?



MAIN ISSUES IN DATA COLLECTION, ENUMERATION AND SUPERVISION

1. METHODOLOGIES THAT ARE NOT SUITABLE FOR THE COLLECTION OF DETAILED DATA IN EITHER TIME OR SPACE

2. POOR INSTITUTIONAL ARRANGEMENTS, PERSONNEL LACK THE NECESSARY SKILLS OR MOTIVATION TO DO THE JOB, AND THERE IS LITTLE TO NON-EXISTENT SUPERVISION

3. A NON-EFFICIENT SYSTEM FOR THE INPUT, COLLATION AND ANALYSIS OF DATA (USUALLY, THE INDISCRIMINATE USE OF EXCEL)

4. A LACK OF COMPLIANCE FROM THE FISHING INDUSTRY, INCLUDING DATA MISREPORTING AND IMPEDING FISHERIES EMPLOYEES ACCESS TO OFFLOADING, PROCESSING AND PACKING AREAS

5. A HIGH NUMBER OF PORTS, PRIVATE DOCKS, AND INFORMAL LANDING SITES

6. A LACK OF A SAMPLING STRATEGY (STRATIFICATION)

TO COLLECT SOUND DATA, WE NEED TO REDUCE OR ELIMINATE THE BIAS IN GEAR/SPECIES IDENTIFICATION

1. REDUCE SPECIES AGGREGATION
2. RECORD THE CORRECT GEAR TYPE OR CONFIGURATION, AS IT MAY CHANGE
3. FISHING STRATEGY MAY CHANGE, EVEN WITHIN A TRIP

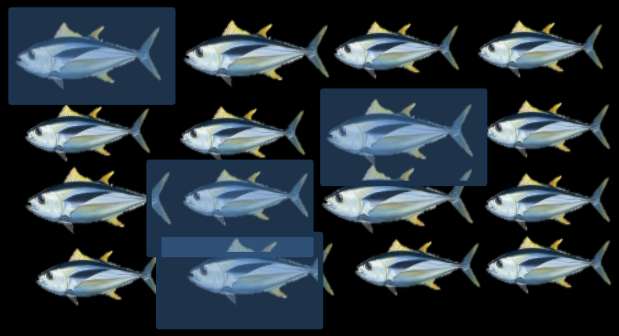
WHY IS IT IMPORTANT TO IDENTIFY THE FISHING GEAR CORRECTLY?

FISHING GEARS ARE SELECTIVE FOR:

1. SPECIES
2. SIZES
3. QUANTITIES CAUGHT
4. BYCATCH SPECIES
5. INTERACTIONS WITH ETP SPECIES

ALSO, THEY MAY AFFECT THE EFFORT DUE TO THEIR NUMBER, SIZE, AND CHARACTERISTICS

BIAS IN LENGTH-FREQUENCY AND SPECIES COMPOSITION DATA COLLECTION



- DO I TAKE A RANDOM SAMPLE OF THE CATCH?

- TAKING RANDOM SAMPLES OF MIXED LENGTHS AND WITH RARE SPECIES IS DIFFICULT

BIAS IN LENGTH-FREQUENCY AND SPECIES COMPOSITION DATA COLLECTION

AM I CORRECTLY MEASURING THE LENGTH OF THE FISH?

- WHAT TOOLS DO I USE?
- HOW DO I MEASURE THE FISH?
- IF THE FISH IS PROCESSED, DO I MEASURE IT?

PROTOCOLS AND SUPERVISION

1. SAMPLING PROTOCOLS MUST BE DOCUMENTED

2. ENUMERATORS NEED TO BE WELL-TRAINED TO BE ABLE TO UNDERSTAND THE SAMPLING PROTOCOL AND IMPLEMENT IT CORRECTLY

3. CONDITIONS IN THE FIELD MUST BE REVIEWED CONTINUOUSLY, AND PROTOCOLS CHANGED IF NECESSARY

WEAK SUPERVISION
=
WEAK SAMPLING

1. THE IMPLEMENTATION OF THE CORRECT DATA COLLECTION PROTOCOL NEEDS TO BE MONITORED PROPERLY

2. THE AUTHORITY MUST WRITE A PROTOCOL FOR THE SUPERVISION OF DATA COLLECTION ACTIVITIES, COORDINATING WITH THE PROVINCE, STATE, ETC

WEAK SUPERVISION
=
WEAK SAMPLING

3. REWARD AND PUNISHMENT SCHEMES FOR MONITORS SHOULD BE IMPLEMENTED BASED ON THE LEVEL OF COMPLIANCE WITH DATA COLLECTION PROTOCOLS

4. WHEREVER NEEDED, SUPERVISION AND DATA COLLECTION PROTOCOLS CAN BE CHANGED TO FOLLOW DEVELOPMENTS IN THE FISHERIES SECTOR

WHAT SHOULD ENUMERATORS KNOW?

- HAVE BASIC KNOWLEDGE ABOUT THE TYPE AND OPERATION OF THE FLEETS TO BE SAMPLED INCLUDING THE GEARS
- HAVE BASIC KNOWLEDGE OF SAMPLING STRATEGY AND USES OF THE DATA
- KNOW HOW TO SELECT AND TAKE SAMPLES (KNOW WHAT IS THE SAMPLING UNIT USED)

WHAT SHOULD ENUMERATORS KNOW?

- CORRECTLY IDENTIFY THE SPECIES LANDED INCLUDING BYCATCH
- MEASURE THE LENGTH AND WEIGHT OF FISH UNLOADED (AND COLLECT OTHER BIOLOGICAL INFORMATION AS REQUESTED)
- WHAT EFFORT MEANS, AND HOW TO MEASURE IT FOR THE DIFFERENT TYPES OF FLEETS

WHAT SHOULD ENUMERATORS KNOW?

- THE DIFFERENT TYPES OF FORMS USED, HOW TO FILL THEM AND TIMING OF DELIVERY TO SUPERVISORY/DATA ENTRY STAFF
- BE AWARE OF A “CODE OF CONDUCT” FOR RESPONSIBLE SAMPLING (*I.E.* HOW TO SAMPLE WITHOUT INTERFERING WITH UNLOADING OPERATIONS AS WELL AS GENERAL BEHAVIOUR WHILE WORKING)
- BE ABLE TO IDENTIFY CHANGES IN THE FISHERIES/LANDING OPERATIONS AND COMMUNICATE THEM TO SUPERVISORS

WHAT SHOULD SUPERVISORS KNOW?

- HAVE GOOD KNOWLEDGE ABOUT THE TYPE AND OPERATION OF THE FLEETS TO BE SAMPLED
- HAVE GOOD KNOWLEDGE OF THE SAMPLING STRATEGY AND USES OF THE DATA
- CONDUCT FREQUENT SUPERVISORY TRIPS ON WHAT INFORMATION TO COLLECT, AND WHAT TO CORRECT

WHAT SHOULD SUPERVISORS KNOW?

- SELECT AND TAKE SAMPLES (KNOW WHAT IS THE SAMPLING UNIT USED)
- TARGET AND BYCATCH SPECIES AND HOW TO COLLECT BIOLOGICAL DATA
- WHAT EFFORT MEANS, AND HOW TO MEASURE IT FOR THE VARIOUS FLEETS

WHAT SHOULD SUPERVISORS KNOW?

- THE DIFFERENT FORMS USED, HOW TO COMPLETE THEM, AND HOW TO IDENTIFY MISTAKES
- ENTER DATA AND CONDUCT BASIC TESTS TO FIND ERRORS IN THE ENTRY
- CORRECT MISTAKES FOUND IN THE SAMPLING

WHAT SHOULD SUPERVISORS KNOW?

- TRAIN NEW ENUMERATORS
- IDENTIFY CHANGES IN THE FISHERY/LANDING OPERATIONS AND COMMUNICATE THEM TO THE HEAD OF STATISTICS OR IMMEDIATE SUPERVISOR

COMMUNICATION BETWEEN ENUMERATORS AND FISHERS IS ESSENTIAL

ENUMERATORS SHOULD:

1. INTRODUCE THEMSELVES (USING A LETTER/CARD/ID ISSUED BY THE RELEVANT AUTHORITY)

2. EXPLAIN WHY THEY NEED TO COME TO THE PORT (OR SUBMIT A JOB DESCRIPTION NOTE PREPARED BY THE AUTHORITY)

COMMUNICATION BETWEEN ENUMERATORS AND FISHERS IS ESSENTIAL

ENUMERATORS SHOULD:

3. EXPLAIN WHY THE INFORMATION COLLECTED IS IMPORTANT AND USEFUL FOR THE FISHING SECTOR, COUNTRY, AND RFMOS

4. REPORT TO THE SUPERVISOR THE COMPANY OR FISHER WHO DOES NOT COOPERATE

ENUMERATORS NEED THE SUPPORT OF GOVERNMENT AND INDUSTRY

1. LEGISLATION THAT AUTHORISES THEIR ACCESS AND OBLIGES THE INDUSTRY TO PROVIDE ACCESS FREE OF HARASSMENT
2. A SAFE AND ACCESSIBLE WORKING AREA TO CONDUCT THE SAMPLING
3. THE COOPERATION OF THE INDUSTRY TO MEASURE AND SAMPLE THE FISH WITHOUT DETRIMENT TO THE FORMER IN TERMS OF DAMAGE OR SLOWING DOWN ITS JOB

THANKS

QUESTIONS?