

## Output description

**Output 1.1.3** Bycatch and catch data gaps in the northern Indian Ocean tuna-directed driftnet fisheries effectively filled through engagement of fishing communities and CSOs using co-management approaches.

Briefly describe the output in terms of:

1. What will be achieved?
2. Structure of the process towards achievement?
3. Intermediate targets?
4. Why it is important for the entire project and the achievement of the outcomes?
5. Partners involved, roles and responsibilities in terms of supervision, coordination, implementation of the activities and monitoring
6. This description can be mostly based on what is in the project document, including information on -up activities and an update of any changed external conditions that may affect project implementation (required for the inception report) and adding some more information.

1. This output will achieve the provision of new and supplementary data catches in the tuna-directed driftnet fisheries in the northern Indian Ocean countries to assist decision makers in taking appropriate management actions.
2. The process toward achievement will involve filling data gaps through filled through engagement of fishing communities and CSOs using co-management approaches, including the development of a human observer system.
3. The intermediate targets will be (IT1) a capacity building workshop, (IT2) an RFMO compliance program involving on-board observation and Automatic Identification System (AIS) testing, (IT3) gear modification pilots, and (IT4) awareness campaigns.
4. This output is important to achieving Outcome 1.1. (Improved management decision making concerning tuna and associated species in the areas under the jurisdiction of the five Regional Fisheries Management Organizations for tuna, through enhanced engagement and motivation of the stakeholders, including the tuna industry at all levels) and to the project broadly because the characteristics of the gillnet fisheries of Indian Ocean coastal States are largely unknown, as are levels of bycatch which include sharks, cetaceans, turtles and seabirds. The tuna fisheries of the Indian Ocean differ to those in other parts of the world in that artisanal and semi-industrial fisheries are responsible for over 54% of all catches, with gillnets responsible for approximately 40% of all catch. Developing good information about these fisheries is crucial for improving the decision making of the IOTC and for achieving sustainable fishery management in the region.
5. This output will be delivered by WWF including especially WWF Pakistan, and will be conducted in close cooperation with industry, governments and the IOTC.

## 6. Additional information:

-- Recognizing the artisanal nature of many of these fleets often working remotely from designated national fisheries authorities, innovative solutions to conservation issues will be explored, likely including a forum for collective engagement with relevant individual stakeholders to share information.

## Summary task and intermediate target description

Briefly describe the summary task in terms of:

1. What will be achieved?
2. Structure of the process towards achievement?
3. Why it is important for the achievement of the output?
4. Partners involved and what will they do?

*(Note: each Summary Task should link to an Intermediate Result.)*

### Summary Task 1: Capacity Building Workshop

1. This work will achieve (IT1) a capacity building workshop.
2. The process toward achievement will include planning and holding two workshop covering data collection and satellite monitoring of vessels.
3. The workshop will establish a basis of support for an observer program and AIS testing on tuna vessels operating in the NIO countries.
4. WWF will lead, working closely with FAO, ISSF, the relevant t-RFMOs and member states.

### Summary Task 2: RFMO Compliance Program

1. This work will achieve (IT2) inform the development of a RFMO Compliance Program involving on-board observation and AIS testing.
2. The process toward achievement will include two activities:  
Activity 1: On-board observer program (15% of tuna gillnets for 8 months)  
Activity 2: Testing of AIS system (5% of tuna gillnets)
3. The observer program and AIS testing will help to fill data gaps regarding catch and bycatch in tuna gillnet fisheries.
4. WWF will lead, working closely with FAO, ISSF, the relevant t-RFMOs and member states.

### Summary Task 3: Gear Modification pilots

5. This work will achieve (IT3) the assessment of the effectiveness of certain gear modifications, in partnership with fishing communities, to reduce bycatch. Modifications likely to be tested include tuna long lining.
6. The process toward achievement will include design of the pilot, recruitment of fishing vessels for trials, analysis and results sharing, replication of the pilots.

7. The pilots are intended to reduce bycatch and also collect additional information to fill data gaps.
8. WWF will lead, working closely with FAO, ISSF, the relevant t-RFMOs and member states.

Summary Task 4: Awareness Campaigns

9. This work will achieve (IT4) awareness campaigns through publications, brochures, toolkits.
10. The process toward achievement will include consultation and planning to organize community level activities and recruit the most effective participation for those events.
11. The events are intended to build support for the adoption and effective implementation of CMMs for harvest strategies.
12. WWF will lead, working closely with FAO, ISSF, the relevant t-RFMOs and member states.

*Note: The tasks and activities above were described for the first 2.5 years of the project based on the budget indicated by Rab. Are changes required to consider the full 5 years of the project?*