

## **Highlights –**

1. Logbook data collection Pagimana, Pangkalaseang, and Banggai Laut;
2. Biological data collection of size, sex, and maturity at the processor level;
3. Landings data collection using Android apps;
4. SPOT Tracker device applied in and Pagimana, Pangkalaseang, and Banggai Laut;
5. Community-based surveillance activities pilot testing in Pangkalaseang; and
6. Initiate a program to collect additional scientific data on the retained catch, bycatch, and endangered, threatened, and protected (ETP) species.

**Sea Delight’s FIP Membership and Contribution** – Sea Delight, LLC specifically engages its supply chain in FIP activities for handline caught snapper and grouper from the Luwuk-Banggai area of Indonesia. Sea Delight officially joined the Seafood Savers program in October 2010 as a prerequisite for FIP participation. Seafood Savers is a program led by WWF Indonesia (WWF-ID) that engages seafood businesses to work in and promote sustainable fisheries. Sea Delight’s ongoing participation in the FIP and membership in the Seafood Savers program is conditional upon satisfactory completion of activities outlined by Seafood Savers. The Seafood Savers program has broken down the FIP action plan into specific, ground level activities that are tasked to Seafood Savers’ members and other FIP stakeholders. The Seafood Savers agreement outlines specific steps Sea Delight will take to improve the snapper and grouper fisheries in Central Sulawesi (FMA 715) and Northern Moluccas (FMA 714) with an estimated timeline of five years to complete all initial company activities. Sea Delight’s progress is outlined below:

## **2014-2015 Sea Delight FIP Activities –**

1. **Logbook Data Collection** - The logbook data records the volume of purchased raw material based on Sea Delight’s local supplier’s receiving receipts. This data has been collected since 2011 and reached its third year of collection in October 2014. This data can be used to analyze reef fish stock in the fishery and has been shared with WWF Seafood Savers for analysis.
  - a. **FIP Action Supported** – Collecting data on volumes of raw material purchased contributes to the fishery dependent data being used to approximate stock status, health, and age distribution.
  - b. **Importance** – Understanding the stock status, health, and age distribution will provide important baseline information to gauge the effect of improvement efforts as well as inform the creation of effective management measures.



2. **Biological Data Collection** - Sea Delight's processor has been collecting data on gonad (sexual) maturity level. Individual fish length composition (standard length, tail fork length, total length in centimeters), weight in kilos, and sex identification are entered into the data collection forms daily. This data collection project has been implemented for over 1 year at the date of this report.
  - a. **FIP Action Supported** – The collection of these data fulfills the MOU activity of collecting stock information and collecting biological samples from fish reproductive organs.
  - b. **Importance** - Biological data from catch provides information on the stock status and age distribution that is necessary for effective management.
  
3. **Landings Data Collection via Android Platform** – In September 2014 a new method of catch data collection was tested daily in the fishing communities of Pagimana, Pangkalasean and Banggai Laut. Android tablets were used to record and upload the data with an application called "AKVO". The application records the number of fishermen, number of boats, boat's engine size, length of the vessel and the catch of each target species and the name of the fish in the local dialect. Data was sent to the WWF Seafood Savers administrator automatically whenever an internet connection became available.
  - a. **FIP Action Supported** – Collecting data on fishery attributes supports the MOU activity of collecting information on the characteristics of fishing trips.
  - b. **Importance** – Understanding the fishery's attributes provides information on the capacity to catch fish and the amount of fish that are that is necessary for effective management.
  
4. **SPOT Tracker Trials** - Satellite communication devices using GPS satellite technology are being tested to help map the fishing grounds and test the capability of fishers to communicate with simple messages; "I am OK", "I see illegal fishing" and "Emergency Help!" In Pangkalasean one vessel has been using the SPOT device successfully.
  - a. **FIP Action Supported** – The use of SPOT Tracker has supported the MOU activity of collection information on fishing grounds.
  - b. **Importance** – Understanding where fishing effort is directed will aid the creation of effective management measures and inform the placement of possible marine protected areas.

**Sea Delight Next Steps** – WWF-ID has recommended a draft set of next steps for consideration by Sea Delight. While not final and still need to be discussed with Sea Delight, the draft set of recommended next steps provide insight into areas that Sea Delight can focus improvement efforts and financial resources within its supply chain. Focal areas include:

1. Work with fishing communities to develop underwater survey maps;
2. Facilitate the development of sustainable fisheries regulations at the provincial level in Banggai and Banggai Laut;



3. Develop a management plan for snapper and grouper in Banggai and Banggai Laut;
4. Initiate a trial to record bycatch of ETP species;
5. Establish a traceability system for the fishery; and
6. Remote Sensing based analyze for ecosystem assessment in the Banggai archipelago.

