WWF - Partnership Program Towards Sustainable Tuna

SUPPLY CHAIN MANAGEMENT CONSULTANCY

-FINAL REPORT-



ACKNOWLEDGEMENTS

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Finally, I would like to thank Catherine Zucco, PPTST Project Lead on behalf of WWF Germany, and the partners of the program, Sea Fresh B.V. Bell – COOP and New England Seafood for giving me the opportunity to assist in moving the Partnership Program Towards Sustainable Tuna towards success.



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ACRONYMS

BFAR Bureau of Fisheries and Aquatic Resources

CDS Catch Documentation System

DA Department of Agriculture

DTI Department of Trade and Industry

EU European Commission
European Union

FAO Fisheries Administrative Order
FIP Fisheries Improvement Project
GMP Good Manufacturing Practices

HACPP Hazard Analysis and Critical Control PointsISO International Organization for Standardization

LGU Local government Unit

MSC Marine Stewardship Council

PPTST Partnership Program Towards Sustainable Tuna
WCPFC Western and Central Pacific Fisheries Commission

WWF World Wilde Fund for Nature



EXECUTIVE SUMMARY

The consultant undertook a follow-up mission to the Philippines to work on supply chain management for the WWF Partnership Program Towards Sustainable Tuna for an official period of twelve months (January 1 to December 31, 2014).

The Terms of Reference of the mission focused on day-to-day supply chain activities, fair pricing, traceability, quality improvement, exporter facilities improvement, and a number of studies and analysis. In Mindoro, the Consultant focused on five municipalities with emphasis on the two main landing sites, Mamburao and Sablayan. In Lagonoy Gulf, the focus was on the two main landing sites, Tabaco and Tiwi as recommended by the project management.

The status of the tuna fisheries in Lagonoy Gulf is very different compared to Mindoro Occidental: the fishery in Lagonoy Gulf is less organized and less commercialized. Additionally, at the start of the first mission the project exporters were not buying tuna from this project site. For this purpose, the approach of the Consultant was adjusted on the needs of each project site.

To assist project partners with a stable supply of A – grade tuna, close collaboration with the project exporters was crucial. Project exporters were visited on a weekly basis and the Consultant tried to assist them in order to improve both the supply and the quality of the tuna. Additionally, if problems popped-up, exporters were assisted in order to solve these problems. Records of exported volumes were kept and reported to the project on a monthly basis and as shown in the figure on the next page, 210,543 Kilo of tuna was exported, while 210,543 kilo of tuna was ordered. This means that 97% of the orders were fulfilled.

The Consultant incorporated the ISO 12875 traceability standard for finfish fisheries together with MSC Chain of Custody standards (CoC), BFAR requirements, and additional EU requirements into a single traceability standard that is applicable to artisanal handline fisheries in the project sites. Several training manuals and documents were developed for this purpose.

A large portion of the mission included working on traceability with the supply chain actors, both in Manila and in the field. Numerous trainings were organized with fishers to get them familiarized with the traceability standard and the role fishers play in this system. Additionally the Consultant and the WWF – Philippines staff focusing on the supply chain, made regular follow-ups as well.

The framework for quality improvement work with the supply chain actors was developed during the Consultants' first mission in collaboration with tuna handling expert Steven Roberts. Additionally during the second mission, two field guides have been developed as a practical reference for supply chain actors in the project. Numerous small trainings and workshops were organized by the Consultant and the WWF – Philippines, staff focusing on the necessary supply chain improvements.

A large training was organized in April with mission expert Steven Roberts. While the training in 2013 focused on the tuna handling practices for fishers, the second training focus on increasing the knowledge of exporters and buying stations on HACCP and to increase their internal verification capabilities.



As part of the mission of Steven Roberts to improve the compliance of exporter facilities with EU regulations, an internal rapid assessment was held at the facilities of JAMTi and DNL.

The list with non-conformances were discussed with both exporters and solutions were proposed. The team of DNL have extensively renovated their factory and by now, all recommendations have been implemented at their factory. Due to the temporally-closure of JAMTi not all improvements have been implemented yet at their facility.

Besides the main activities in the ToR's the Consultant was requested to executive a number of other activities including, joining the partner meeting in Hamburg, Germany to present an overview of the supply chain to NES, presenting the project to customers at the Brussels Seafood Expo, presenting the project to the management of COOP in Basel, Switzerland.

Additionally a number of studies were made including value chain analysis, estimated volumes from the project sites and a supply chain calendar and number of proposals was development to bring the supply chain and the project in general to a more sustainable level.

Detailed descriptions of all activities, studies, and proposals can be found in this final report and its attachments.



INTRODUCTION

The PPTST project is a partnership between WWF - Germany, WWF - Philippines, the Investitionsund EntwicklungsgesellschaftmbH (DEG) development bank, and several partners from the private sector. The project implements a Fisheries Improvement Project (FIP) for artisanal handline fishers in the Philippines who target Yellow Fin Tuna (*Thunnus albacares*) for export to Europe.

The project is implemented in two sites in the Philippines, Lagonoy Gulf, and Mindoro Strait, covering approximately, 5000 fishers. For now, about 400 fishers, 7 buying stations, 3 exporters, and 3 European importers are directly involved in the project.

The consultant undertook a follow-up mission to the Philippines to work on supply chain management for the WWF Partnership Program Towards Sustainable Tuna for an official period of twelve months (January 1 to December 31, 2014) although the work started at November 21 and all activities starting November 21 are included in the report.



TERMS OF REFERENCE

The Terms of Reference for the mission included the following main goals and activities:

Main Functions

- **1.** Facilitate management of the Yellowfin Tuna supply chain from the project sites to our project partners;
- **2.** Successfully implement assigned supply chain work, monitor progress and contribute to reporting requirements of the project;
- **3.** Facilitate the process towards MSC certification, as detailed in the work plan, and ensure necessary follow-ups and adjustments in the supply chain to secure MSC Chain of Custody certification.

Main Duties and Responsibilities

Day-to day work

- **4.** Facilitate the management of the supply chain on a day-to-day basis to secure and monitor volumes of Yellowfin Tuna and report the figures to the European partners and WWF Germany on a monthly basis;
- **5.** Liaise with the exporters with the aim to develop trust in and dedication for the project as well as to address any issues the exporters have with their European partners;
- **6.** Participate in the preparation, organisation and implementation of project activities in Manila and in the two project sites with the aim to achieve MSC certification for the tuna handline fisheries in the two project sites;
- **7.** Identify required technical support, and organize and manage consultants to provide such technical inputs, where and when required;
- **8.** Organise the meetings of the steering group and inform and discuss current issues in the project;
- **9.** Contribute to the regular project monitoring and reporting to European partners and WWF on a monthly basis, back-to-office reports and contributions to the quarterly reports based on the outcomes defined in the work plan of the supply chain consultant and in accordance with the tasks of these ToRs;
- 10. Finalise the work plan of the supply chain consultant for 2014 by the 31 December 2013 in coordination with WWF and the overall project manager. Additional tasks that result from these ToRs as well as measurable outcomes, where possible, should be added in the work plan;
- **11.** Assists in the preparation of annual work plans to address the above tasks properly in the project's planning documents;
- **12.** Conduct any other duty as deemed necessary to secure the supply chain of Yellowfin Tuna and achieve MSC certification, with focus in MSC Chain of Custody Certification, for the two Yellowfin Tuna handline fisheries.



Specific Tasks

Fair pricing

- **13.** Encourage exporters and casa operators to practice quality buying from the fishers to ensure that fish handling on board is improved, thus the amount of high quality tuna from the project sites increases without increasing fishing pressure;
- **14.** Ensure that fishers working in the project receive benefits from participating in the project, i.e. incentives, better prices, and other benefits resulting from project participation.

Traceability

- **15.** Work with dedicated supply chain actors towards full compliance with Marine Stewardship Council (MSC) requirements, especially the Chain of Custody (CoC) requirements, and ensure necessary follow ups and adjustments to secure MSC CoC certification:
- **16.** To ensure that catch certificates reflect the actual origin of the fish;
- **17.** Assist in establishing a Catch Documentation Scheme, in line with MSC requirements, that also supports data collection for management of the fishery;
- **18.** Organise, assist in and provide technical assistance and training for all stakeholders in the supply chain, including exporters, tuna casas and fishers to secure the Yellowfin Tuna supply and improve traceability, catch documentation and quality of tuna;
- **19.** Support the project with improving and/or developing practical data collection systems tailored to meet the needs of this specific fishery and local fisheries authorities;
- **20.** Work together with project staff on the implementation of other work plan activities covering supply chain issues.

Quality improvement

Improved buying stations

- **21.** Prepare, organise and conduct training for buying stations with the aim to increase the quality of the Yellowfin Tuna landed, including handouts, hands on training sessions, as well as practical advice at landing sites and in buying stations;
- 22. Facilitate approval of casas in both project sites for export to the EU.

Improved fishing boats

- **23.** Prepare, organise and conduct training for fishers with the aim to increase the quality of the Yellowfin Tuna landed, including handouts, hands on training sessions, as well as practical advice at landing sites and on board of tuna handliners;
- **24.** Facilitate EU approval of boats in both project sites to broaden the base of vessels able to provide export quality tuna.



Improved exporter facilities

- **25.** Establish a sourcing policy to secure tuna quantities;
- **26.** Regularly check the volumes and origin of tuna shipped by Manila exporters to the European project partners, also for validating data provided by European project partners;
- **27.** Work with European partners on the buying plan, including an information exchange about promotions, incidents affecting the tuna supply, etc;
- **28.** Link Manila project exporters with buying stations in the two project sites to stabilize the supply of tuna;
- **29.** Adjust and renew supplier contracts, taking into account the exporter and funding partners proposals to provide guidelines for sourcing, equal and transparent partnership approach, and support for the PPTST project goals (signed contracts before April 2014).

Link between supply chain actors

- **30.** Assist exporters in the management of the Yellowfin Tuna supply to European project partners;
- **31.** Strengthen relationships and facilitate the setup of respective agreements with dedicated exporters with the aim of establishing long-term commitments with European project partners;
- **32.** Assist the Manila exporters to establish a link and business cooperation with casas in Lagonoy Gulf to initiate the export of tuna from this project site;
- **33.** Organise same level supply chain actors as deemed necessary and possible;
- **34.** Organise the Manila based exporters to deal with pertinent issues of concern, including traceability;
- **35.** issues, EU requirements, fish handling and processing, but also improved and cost effective transportation of tuna out of the project sites, defences against companies trying to distort the local tuna market, etc.

Studies and Analyses

Conduct studies and reports on the following subjects:

- 36. Statistics on volumes out of each project area (31 December 2013),
- 37. Supply chain mapping (31 March 2014), and
- **38.** Value chain analysis (31 December 2013).



ADDITIONAL RECOMMENDATIONS AND OBSERVATIONS

As part of this consultancy a tuna handling and fish processing expert, Steven Roberts, was contracted by WWF – Germany (April 14 to May 15, 2013) to provide additional recommendations for this mission.

A number of main recommendations were made about buying stations in Mamburao (Mindoro) as shown in the excerpts of the final mission report:

One buying station (D&L) had made impressive improvements to infrastructure standards (now mostly compliant). There was also evidence of monitoring forms on show for temperature monitoring, source control and hygiene monitoring. The ME expert suggested a few improvements:

1. The monitoring forms to collect a little more information on arriving tuna (e.g. signs of bleeding and spiking);

Food control issues that continue to plague the two other operations in Mamburao (partners of JAMTi and Jarla) include:

- 2. No temperature monitoring of arriving fish (one operator said he did not use a thermometer because he knows the temperature by touch!);
- **3.** Fish arrive without spiking or bleeding at the point of capture (as taught in the training courses in July 2013);
- **4.** The tuna is graded on arrival but no records are kept;
- **5.** Tuna continues to be stored in ice plus water instead of ice alone. The ice was not clean and the water was discolored and bloody;
- **6.** Insulated storage containers were not clean and not perfectly maintained in a good state of repair;
- **7.** There were wooden tools, rusty scales and lights over product that were not protected with plastic covers;
- 8. There was no evidence of tuna being tagged as part of a traceability system;
- **9.** No evidence of any monitoring or traceability records;
- **10.** One operator was filling a truck with fish that was being sent to Manila. The condition of the truck and packing of fish inside (including tunas) was inappropriate for the EU market.

General Recommendation:

11. It is recommended that the PPTST Supply Chain Manager provide hands-on support to each tuna exporter to encourage them to develop and implement a robust Verification Schedule for HACCP, GMP and SSOP.



Regarding the review of the Best Practice Guidelines on Traceability:

- 12. The scope of the draft Traceability Guideline is unclear and confusing. What is the purpose of the Guideline and who is it aimed at? If it is the PPTST stakeholder, then it is overreaching and impractical. If it is for a wider international audience then the danger is that it is too theoretical / academic (i.e. an untried and untested traceability system). As previously stated in section XX the ME has again concluded that the PPTST has yet to implement a traceability system for the tuna which means that exported tuna is not in compliance with EU requirements.
- **13.** It is recommended that the Traceability Guideline be focused on serving the needs of project stakeholders.
- **14.** From a reader's perspective it is not obvious if the Guideline is for stakeholders within the PPTST or a wider international audience.

After the mission, the following additional recommendations for recording keeping of exporters and buying stations were made:

- 15. Records/form must contain address / contact details for specific location (info is missing)
- **16.** Tuna linked to black arrow (not used / sold local market). Monitoring record does not reflect that these are reject fish (i.e. information not supplied about why the fish was not suitable for export). In fact the receiving assessment results show that the rejected fish were as good as fish that were kept for export purposes.
- 17. Production Monitoring Report (7th page). The form needs a redesign because it is not clear what some of the recorded information means and some data are written outside headed columns. What do the numbers marked in red mean? What do the pink highlighted numbers mean? Forms need to be designed so that information can be properly recorded and the information is easy to understand.
- **18.** Packing List form contains no name and address of company. Red = sashimi grade / Blue = cook grade? This is not clear.
- **19.** Raw Material Receiving Report (p9). Name of specific Casa not included. Catch location information not included. (What is this form used for? Is it for BFAR? Or is it part of the traceability system?)
- **20.** Page 10 form is better (will this replace p9 form?). The grading information is given here. However, I would prefer to see the grading information linked to internal temperature and organoleptic assessment, and whether the fish were brain-spiked and bled, and then linked to the tag number (one form with all this information would be very useful).

The majority of these recommendations have been implemented and issues have been resolved. In the upcoming chapter "Main Achievements" we refer to these recommendations and the Terms of Reference at the end of each chapter.



MAIN ACHIEVEMENTS

To successfully accomplish the mission as outlined in the Terms of Reference and the additional recommendations provided, a number of activities were undertaken. These activities have been classified in the in the following categories (in line with the Terms of Reference):

- I. Day-to-day supply chain activities
- II. Fair pricing
- III. Traceability
- IV. Quality improvement
- V. Exporter facilities improvement
- VI. Studies and analysis
- VII. Other activities

This final mission report follows the above outline. At the bottom of each chapter, we will refer to the main recommendations for this mission and the Terms of Reference to show the relationship between the main achievements and the framework of the mission.



1. DAY-TO-DAY SUPPLY CHAIN ACTIVITIES

To assist project partners with a stable supply of A – grade tuna, close collaboration with the project exporters was crucial. Project exporters were visited on a weekly basis and the Consultant tried to assist them in order to improve both the supply and the quality of the tuna. Additionally, if problems popped-up, exporters were assisted in order to solve these problems.

Records of exported volumes were kept and reported to the project on a monthly basis and as shown in the figure on the next page, 210,543 Kilo of tuna was exported, while 210,543 kilo of tuna was ordered. This means that 97% of the orders were fulfilled.

Of the 210,543 of tuna that was shipped:

- 50,912 of Fresh Yellowfin tuna products were shipped to Sea Fresh;
- 19,300 of Frozen Yellowfin tuna products were shipped to Sea Fresh;
- 140,331 of Fresh Yellowfin tuna products were shipped to Bell and COOP.

For a summary of the shipped volumes, please see the table on the next page. A larger and more detailed overview of the shipped volumes can be found attached to this report.

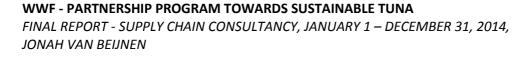


| VOL | VOLUMES - WWF PARTNERSHIP PROGRAM TOWARDS SUSTAINABLE TUNA - 2014 | | | | | | | | | |
|---------------------|---|-------------|---------------|---------------|--------------|---------|--|--|--|--|
| | | | | | | Total | | | | |
| Project Partner | Customer | Country | Product type | Supplier | Status | (Kg) | | | | |
| Sea Fresh B.V | Gadus / Delhaize | Belgium | Fresh Loins | Jarla | Planned | 27,550 | | | | |
| www.seafresh.nl | www.gadus.be | | | | Actual | 24,042 | | | | |
| | www.delhaize.be | | | | Percentage | 87% | | | | |
| | Leroy | Norway | Fresh Loins | Jarla | Planned | 9,720 | | | | |
| | www.leroyseafood.com | | | | Actual | 8,049 | | | | |
| | | | | | Percentage | 83% | | | | |
| | Jan van Asch | Netherlands | Fresh Loins | Jarla | Planned | 15,705 | | | | |
| | www.janvanasch.nl | | | | Actual | 14,118 | | | | |
| | | | | | Percentage | 90% | | | | |
| | SPAR | Austria | Frozen steaks | JAMTi | Planned | 19,300 | | | | |
| | www.spar.at | | | | Actual | 19,300 | | | | |
| | | | | | Percentage | 100% | | | | |
| | Sjoboden | Sweden | Fresh Loins | Jarla | Planned | 2,055 | | | | |
| | | | | | Actual | 2,107 | | | | |
| | | | | | Percentage | 103% | | | | |
| | Levenstond | Belgium | Fresh Loins | Jarla Planned | | 1,375 | | | | |
| | | | | | Actual | 1,391 | | | | |
| | | | | | Percentage | 101% | | | | |
| | Albert Heijn | Netherlands | Fresh Loins | Jarla | Planned | 1,095 | | | | |
| | www.ah.nl | | | | Actual | 1,207 | | | | |
| | | | | | Percentage | 110% | | | | |
| Bell | СООР | Switzerland | Fresh Loins | DNL | Planned | 127,509 | | | | |
| www.bell.ch | www.coop.ch | | | | Actual | 128,393 | | | | |
| | · | | | | Percentage | 101% | | | | |
| | СООР | Switzerland | Fresh Loins | JAMTi | Planned | 11,838 | | | | |
| | www.coop.ch | | | | Actual | 11,939 | | | | |
| | · | | | | Percentage | 101% | | | | |
| СООР | СООР | Switzerland | Frozen steaks | JAMTi | Planned | 0 | | | | |
| www.coop.ch | www.coop.ch | | | | Actual | 0 | | | | |
| | • | | | | Percentage | - | | | | |
| Total Project Volu | ıme 2014 (Planned) | | Planned | 216,148 | | | | | | |
| Total Project Volu | • | | | | Actual | 210,543 | | | | |
| | ime 2014 (Percentage) | | | | Percentage | 97% | | | | |
| . Jean Frageet voic | mio Loza (i ciccinage) | | | | . creciitage | 3170 | | | | |

Table 1.0: Summarized volumes of tuna shipped in 2014.

In line with Terms of Reference responsibility number: 1, 2, 4, 5, 7, 25, 26, 27, 28, 29

In line with Recommendation number: - not applicable -





2. FAIR PRICING

In Line with the projects Procurement Principles, fair pricing for fishers was promoted in the field. The principles of fair pricing within our project sites includes a quality buying system in which fishers are rewarded when catching better quality tuna.

During all major field activities, the subject was discussed and promoted. Additionally LGU's were informed about the importance of fair pricing for fishers and their potential role in safeguarding a stable livelihood for fishers. Last, in our Field Guide to Quality and Legal Tuna for Fishers and for buying stations, the matter is discussed.

Fishermen in both project sites that sell their fish to DNL have been rewarded for their hard work and dedication by a consistent price increase. Since JAMTi was closed and since Jarla buys little fish from the project sites, fishers selling to other buying stations and exporters have noticed little difference.

The second issue previously brought up by the Consultant, is the pricing cartel that exporters use to keep prices low in the project sites. All exporters, except DNL, work together to try to keep prices as low as possible. This is partly a results of the repeated requests of project partners to keep prices as low as possible. Lack of interest by project partners to create strict procurement rules for exporters makes it hard to solve the issue.

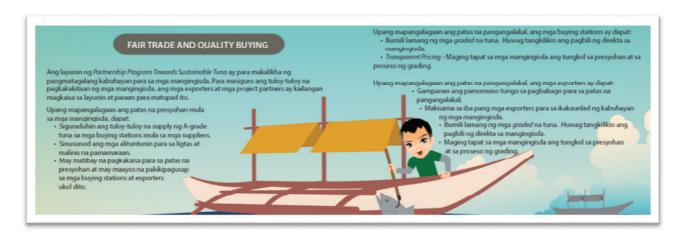


Fig 1.0: displaying a page from the Field Guide to Quality and Legal Tuna for Fishers discussing the importance and principles of fair pricing.

In line with Terms of Reference responsibility number: 13, 14

In line with Recommendation number: - not applicable -



3. TRACEABILITY

Traceability framework

For the proposed traceability standard, we incorporated the ISO 12875 traceability standard for finfish fisheries together with MSC Chain of Custody standards (CoC), BFAR requirements and additional EU requirements into a single standard that is applicable to artisanal handline fisheries in the project sites.

The main traceability steps of the system are included in the visualization below. A larger version of this traceability overview can be found in the attachments.



Fig 2.0: Main steps of the traceability system as being implemented by the project.

Three main documents have been in collaboration with the the PPTST team and WWF – Philippines Environmental Education Unitto promote the use of the traceability standard as developed by the Consultant:

Field Guide for fishers to Quality and Legal Tuna: Joel Palma, President of WWF – Philippines came up with the idea for a field guide (40 pages) for fishers and it guides them step-by-step through the paperwork needed to ensure legal and traceable tuna and funded its development. At the same time, this manual shows the fishers how handle and process the tuna properly from the moment of catching until the delivery at the buying station. The text in the manual is in Tagalog and is accompanied by a number of drawings to visualize what needs to be done. The manual is printed on

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waterproof plastic paper and will be distributed to around 1,000 fishers (See the pictures on page 14 as an example of one of the pages in the field guide)WWF initially experienced some delays in de finalization of the design of the manual for printing but the manual has been printed and partially in December 2014. The content of the manual has been used throughout the year for various presentations and workshops.

I. **Field Guide for Buying Stations and Exporters to Quality and Legal Tuna:** This document is a field guide (40 pages) for buying stations and exporters and it guides them step by step through the paperwork needed to ensure legal and traceable tuna. At the same time it teaches the supply chain actors on how handle and process the tuna properly. This manual is more technical and is written in English.

Due to some delays at the design team, the manual will be finalized during the first quarter of 2015.

II. **PPTST theoretical framework of the traceability standard:** The third document is a manual containing the theoretical framework of the traceability standard as to be able to provide indepth information to supply chain actors, project partners and the national government upon request.

All necessary actions for every supply chain actor in the Philippines are incorporated in the handbook and detailed forms and excel spreadsheets have been developed, for fishers, buying stations and exporters to ensure all required data for traceability is available to retailers in Europe. Attached to this handbook is a CD-ROM that contains all the legal forms, legal documents, forms, and checklists.

The first draft of the theoretical framework was completed by the beginning of October 2103. After a proposed thorough review of the proposed traceability system with an expert on traceability the development of the document was halted. As the expert concluded, the Consultant lost track of the main purpose of the document and tried to please all those involved in the project by incorporating their feedback. After seriously considering the feedback, the Consultant decided to follow the advice of the expert and simplify and refocus the document.

The document is a continues work in progress since required forms and documentations change over time. A copy of the latest document is available upon request.



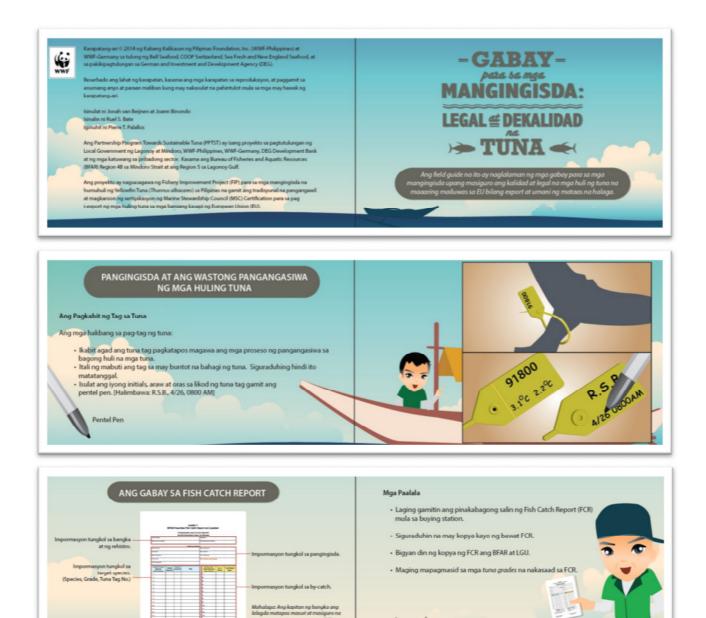


Fig 3.0. Example pages from the Field Guide on Traceable and Quality Tuna for Fishers

The three traceability documents that were developed have provided the foundation for the Consultants engagement in the field on improving traceability with the government and with the supply chain actors involved in the project.

Government Assistance

Traceability work with National BFAR

The PPTST consultant on Supply Chain Management was invited to join an internal workgroup of BFAR and the Department of Agriculture on traceability issues in fisheries. The main goal of the meeting was to initiate a working group within BFAR to develop an improved system for a paper-tail traceability system for fishery products exported to the EU and to develop a strategy for the future implementation of an electronic traceability system for fishery products in the Philippines. A. Perez, National Director of BFAR, presented the output of this working group to the EU in early February in Brussels.

After the initial formation of a traceability workgroup for BFAR in December 2013, a workshop was held in January 2014 in Palawan. The PPTST Consultant on Supply Chain Management was asked by BFAR to join and present at the event.

The goal of the workshop was to:

- Inform the participants of the workshop about the importance and relevance of traceability;
- Formulate a clear strategy for BFAR regarding the traceability of fishery products destined for the EU;
- Prepare a presentation for the EU on traceability issues in the Philippines;
- Develop a draft regulation (Fisheries Administrative Order) on traceability.

The workshop started with two days of presentations on traceability by different speakers. The second half of the week was reserved for BFAR officers only, to develop a draft regulation on traceability.

The Consultant was asked to present a summary of his work on traceability within the PPTST project and he thus gave a brief overview of the designed traceability standard for the project with a practical link on traceability for other fisheries products. After the presentation, the participants had 45 minutes to ask questions and to further discuss the matter. Additional discussions focused on the content of BFAR Circular (regulation) on traceability for finfish products. The theoretical framework from traceability within the PPTST project was used as one of the inputs for this ordinance.



Traceability improvements with supply chain actors

A large portion of the mission included working on traceability with the supply chain actors, both in Manila and in the field.

Numerous trainings were organized with fishers to get them familiarized with the traceability standard and the role fishers play in this system. Additionally the Consultant and the WWF – Philippines staff focusing on the supply chain, made regular follow-ups as well.

The main emphasis on traceability for fishers was:

- Registration and licensing of vessels;
- The use of Tuna Tags;
- The correct filling-up of the BFAR Fish Catch Report.

By now, the majority of the fishers supplying tuna to DNL and JAMTi are providing these exporters with tuna that meets the criteria of our traceability standard.

Similar training activities and guidance were implemented for buying stations as they pay a key role in the supply chain. Since fishers are loyal to buying stations (trough financing schemes), these buying stations help the project, by convincing their fishers, to use tuna tags and fill-up Fish Catch Reports. Additionally, since a number of fishers are not comfortable with filling-up the Fish Catch Reports themselves, buying stations assist and help these fishers with completing their forms. Buying stations also play key role in filling-up the documentation of transporters who transport the raw material to Manila.

The main emphasis on traceability for buying stations was:

- Checking and promoting the use of Tuna Tags;
- Checking and assisting in filling-up the BFAR Fish Catch Report;
- Using updated monitoring forms for arriving fish (including temperature checks);
- Using the BFAR Raw Material Receiving Report;
- Using a set of forms for the transporter to sign and assist in filling-up these forms.

As the documentation takes up a large amount of time it was suggested to project exporters to hire secretaries for all major buying stations in the project sites. DNL and JAMTi complied with this measure and all major buying stations meet the major components of the traceability standard as developed by the project (Some delays in the system for JAMTi as their operation closed down for 5 months).

Lastly, exporters were trained and assisted. Several trainings were organized to explain exporters the importance of traceability and their role in the system. Since exporters control buying stations (trough financing schemes), they assist the project in ensuring buying stations meet all requirements for proper traceability.

On a monthly basis, the Consultant checked protocols during production to ensure the traceability standard was being implemented.



The main emphasis on traceability for exporters was:

For exporters to work with fishers on:

- Registration and licensing of vessels;
- The use of Tuna Tags;
- The correct filling-up of the BFAR Fish Catch Report.

For exporters to work with their partners buying stations on:

- Checking and promoting the use of Tuna Tags;
- Checking and assisting in filling-up the BFAR Fish Catch Report;
- Using updated monitoring forms for arriving fish (including temperature checks);
- Using the BFAR Raw Material Receiving Report;
- Using a set of forms for the transporter to sign and assist in filling-up these forms.

Within exporter facilities, the emphasis was on:

- Check the paperwork and Tuna Tags of arriving fish (new documentation checklist for arriving fish);
- Use of updated monitoring farm;
- Use of updated production reports;
- Use of updated labels.

By now, DNL meets all the components of the traceability system and the team of JAMTi is well on track but delayed due to the closure of their facility.

In line with Terms of Reference responsibility number: 6, 9, 12, 15, 16, 17, 18, 19, 20

In line with Recommendation number: 1, 8, 9, 10. 11, 12, 13, 14, 15, 16, 17, 18, 19, 20



4. QUALITY IMPROVEMENT

Quality framework

The framework for quality improvement work with the supply chain actors was developed during the Consultants' first mission in collaboration with tuna handling expert Steven Roberts.

- I. Tuna handling and processing manual (distributed in June and July 2013 to 140 fishers and other participants of the training program and 14 PPTST field staff): This training manual has been used during the training program for trainers on tuna handling and processing and was developed by Steven Roberts. The manual includes lectures on a variety of subjects ranging from food safety and fish spoilage to boat maintenance and tuna biology;
- II. **DVD on tuna handling and processing** (distributed in August 2013 to the two PPTST field offices and the WWF Philippines main office): This DVD includes all lectures as given by Steven Roberts and additionally it provides a number of videos on tuna handling and processing, tuna fishing, personal hygiene, and safety at sea. This DVD serves as a tool for future trainings;
- III. **Guidelines on Good Manufacturing Practices** (distributed in October 2013 to project exporters and WWF field staff): This training manual is an updated version on the tuna handling and training course as previously prepared by Steven Roberts. The new version includes a general reference chapter to guide supply chain actors to the chapters that are relevant for their business.

The new version also includes a number of BFAR checklists ranging from small vessels to buying stations and exporters and more information on the use of data loggers and the testing of histamine, as previously recommended by Steven Roberts. The guidelines also include recommendation on fair trade. Attached to this manual is a CD-ROM that contains all the PowerPoint presentations, legal documents, forms, and checklists.

Additionally during the second mission, two field guides have been developed as a practical reference for supply chain actors in the project:

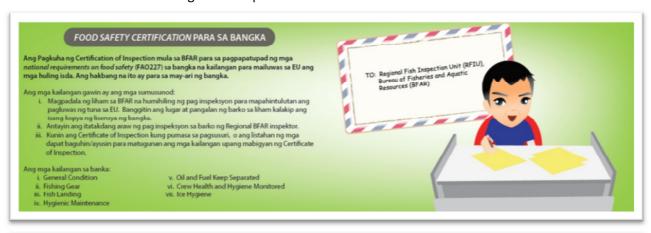
IV. **Field Guide for fishers to Quality and Legal Tuna:** This document is a field guide (40 pages) for fishers and it guides them step by step through the paperwork needed to ensure legal and traceable tuna. At the same time, this manual shows the fishers how handle and process the tuna properly from the moment of catching until the delivery at the buying station.

The text in the manual is in Tagalog and is accompanied by a number of drawings to visualize the work at hand. The manual is printed on waterproof plastic paper and will be distributed to around 1,000 fishers (See the picture on the next page as an example of one of the pages in the field guide).



WWF initially experienced some delays in de finalization of the design of the manual for printing but the manual has been printed and partially in December 2014. The content of the manual has been used throughout the year for various presentations and workshops.

V. Field Guide for Buying Stations and Exporters to Quality and Legal Tuna: This document is a field guide (40 pages) is for buying stations, exporters, and it guides them step by step through the paperwork needed to ensure legal and traceable tuna. At the same time it teaches the supply chain actors on how handle and process the tuna properly. This manual is more technical and is written in English. Due to some delays at the design team, the manual will be finalized during the first quarter of 2015.







 $\mbox{Fig 4.0: Example pages from the Field Guide on Traceable and Quality Tuna for Fishers. } \\$

WWF - PARTNERSHIP PROGRAM TOWARDS SUSTAINABLE TUNA

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Quality improvements with supply chain actors

The status of the tuna fisheries in Lagonoy Gulf is very different compared to Mindoro Occidental: the fishery in Lagonoy Gulf is less organized and less commercialized. Additionally, at the start of the first mission the project exporters were not buying tuna from this project site.

For this purpose, the approach of the Consultant was adjusted on the needs of each project site. The following main priorities and activities were identified:

- Connecting existing buying stations in Lagonoy Gulf to project exporters: At the start of the second mission, only DNL had one small buying station in Lagonoy. By now, this has been expanded to two large buying stations. Additionally, JAMTi has started sourcing tuna from the area.
- Improve the quality of the landed tuna: Little knowledge about tuna handling was present with artisanal handline fishers and therefore regular follow-up trainings have been organized to ensure fishers are equipped with the right technical information.

The fishery in Mindoro Occidental is fully established and therefore the technical assistance provided in the field has been adjusted accordingly. The following main activities and priorities were identified:

- Increase the knowledge of fishers on tuna handling: Although less relevant then in Lagonoy Gulf it was deemed useful to regularly update the knowledge of fishers and try to convince them to adjust their handling methods, as many of these fishers are rather hardheaded.
- Promote quality buying: Since a quality buying system in which fishers are rewarded when
 catching better quality tuna is crucial for the success of the project and to achieve handling
 improvements in Mindoro, the practice of quality was intensively discussed and promoted.
- Improving tuna handling and processing at buying stations: The buying stations play a critical role in ensuring and maintaining the quality and traceability of the tuna. For that reason, a lot of time was spent on improving the operational setup and procedures of these buying stations.

Fishers

Numerous small trainings and workshops were organized by the Consultant and the WWF – Philippines, staff focusing on the necessary supply chain improvements. The focus for quality improvements for fishers are:

- BFAR GMP approval for small vessels;
- Proper ice and storage facilities aboard;
- Proper Gaffing;
- Gilling;
- Gutting;
- Killing procedures.



Buying stations and Exporters

Since procedures for Exporters and Buying Stations overlap and since most buying stations are owned by exporters, these two supply chain actors were jointly trained.

A large training was organized in April with mission expert Steven Roberts. While the training in 2013 focused on the tuna handling practices for fishers, the second training focus on increasing the knowledge of exporters and buying stations on HACCP and to increase their internal verification capabilities.

We used the first days of his mission to plan the training and finalize the materials. Before the training a rapid assessment of factory was made, during which EU – non-conformances were analyzed and solutions discussed. The results of the rapid assessments are for the exporters only, as to improve their facilities and procedures.

Each training lasted 2 days and was held at each individual exporter as to work with small groups and to tailor fit the training to the needs of each individual exporter. During the training, a number of topics were discussed in the form of lectures and a number of assignments were handed out to teach Quality Control and other management staff how to develop, check and improve internal audit systems related to food safety.

For reasons unclear to the Consultant, the participants from Jarla cancelled their training and rapid assessment one day before the actual event.

The second part of the training led by Steven Roberts, focused on improving the setup and protocols of buying stations with regards to food safety. Since the Consultant was in Brussels, Project Manager Joann Binondo coordinated the training with the excellent help of Site Manager, Lito Tiongson.

The training materials for the course consisted of a revised manual on tuna handling and processing with a number of checklists attached to it. After studying the traceability and records system of different buying stations, Steven Roberts selected the system as currently used by DNL as a model for his training course.

The course consisted of two days of lectures and practical assignments, followed by 2 days in which the Steve visited the different buying stations and pointed out potential improvements.

Smaller trainings, workshops and visits were used to further fine-tune the handling and processing protocols used by buying stations and exporters.

To ensure quality standards are met we worked hand in hand with exporters (Management and Quality Control staff) on the following improvements at their buying stations:

- Ensure buying stations and fishers implement procedures that guarantee quality control;
- Ensure buying stations understand the basics of food safety and fish spoilage (See Chapter 4

 Food Safety and Quality Issues, Chapter 8 Fish Spoilage Control Factors, Chapter 9 Personal hygiene, Chapter 10 Clean work area of the guidelines on Good Manufacturing Practices).



- Additional training for the manager of each buying station to raise awareness on the importance of proper hygiene practices;
- Ensure the footbath and hand washing facilities are used at all times;
- Measure the temperature of all fish at moment of reception, reject if the temperature of the fish is above 4.4 Degrees;
- No storage of tuna in the buying station for periods exceeding 36 hours;
- No storage of other species of fish and tuna that are not meant for export to the EU in the same storage container as tuna that is destined for the EU market.

Buying stations were also urged to motivate fishers to improve their operating procedures:

- Proper gaffing of fish (use larger gaffs and use the gaff only at the gills and mouth; no puncturing of loins);
- Stunning, bleeding ,gutting and gilling of fish on board of the vessel;
- Proper storage on board and regular temperature measurements;
- Improve transportation means of fish from vessel to buying station (using a stretcher by foot is recommended and should replace the existing procedure of the use of tricycles to move tuna).

To ensure exporters comply with EU regulations on food safety and hygiene we motivated exporters to:

- Ensure BFAR HACCP standards are implemented (See Chapter 22- BFAR Pre-evaluation checklist for HACCP programs of the guidelines on Good Manufacturing Practices);
- Ensure all points on the attached checklist are implemented (Chapter 21 Checklist for inspecting fish processing establishments;
- Implement stricter hygiene and food safety standards (See checklists in the guidelines on Good Manufacturing Practices) and thus improving existing HACCP plans and their implementation.

By now, all major buying station of DNL and JAMTi have improved their handling and processing procedures an all major recommendations have been implemented. Some improvements still need to be made as discussed in the chapter with Recommendations.

In line with Terms of Reference responsibility number: 21, 22, 23, 24

In line with Recommendation number: 2, 3, 4, 5, 6, 7



5. EXPORTER FACILITIES IMPROVEMENT

As part of the mission of Steven Roberts to improve the compliance of exporter facilities with EU regulations, an internal rapid assessment was held at the facilities of JAMTi and DNL.

The main non-conformances as outlined in the mission report of Steven Roberts were:

In keeping with confidentiality arrangements with the two companies, no specific details will be provided in this report on the outcome of the rapid appraisals. Non-conformances of different rankings were observed in the two companies and both companies indicated their full intentions to correct all the issues that were identified by the ME. The non-conformance issues were either observed while processing was underway, or, ones that were noted in each company's food control documentation and records. None of the non-conformances would be described a 'critical' (the most serious level of non-conformance). The following general comments are provided on the two companies that were assessed:

JAMTi

JAMTi is a very active and dynamic company that produces a number of different seafood-based products for different international markets, including value-added products for domestic clients (e.g. a local, well known, fast food chain). JAMTi is an opportunistic company that handles, processes and markets a range of fishery raw materials based on availability. This business approach is commendable as long as the company does not over-load its production program and over-complicates procedures. That is, trying to process too many different product formats in a factory that has limited space.

For handling and preparing chilled, vacuum-packed tuna loins for the European market the allocation of a small work-area on the factory floor did result in observed non-conformance issues for cross-contamination. Streamlining the workflow of product and applying more control over the movement of product and workers would help alleviate the noted issues. The company agreed that they would carefully revise the arrangements for product flow and staff movements.

The following general non-conformance issues were also identified:

- Cross-contamination issues related to product and ingredients control in a chill store 0°C) and the main cold store (<-18°C);
- Cross-contamination issues related to re-cycled packaging materials;
- Lack of appropriate separation of different processing activities in the main processing rooms (another cross-contamination issues);
- Inappropriate chilled storage of tunas (i.e. use of slurries instead of ice only);
- Lack of an appropriate segregation of EU bound frozen products in the cold store;
- Lack of appropriate real-time automated temperature monitoring devices for all refrigerated stores and freezers;



The ME reported these findings to the company and discussed ways that improvements could be made. Advice was also provided on improving food control procedures in the company's HACCP Manual.

D&L Seafood

The company has a small, functional facility that focuses on handling and processing tuna as its only raw material. Because of its simple operational requirements the company has successfully focused on developing and implementing a reasonable satisfactory food control system. The internal flow of product was generally acceptable with the exception of a common entry point for raw material and exit point for finished product (a potential cross-contamination point). A number of infrastructural defects were also noted and discussed. In summary, the following general issues were identified and discussed with company representatives:

- Apply stricter temperature control range for tunas (0 to 2oC instead of 0 to 4oC) for the EU in monitoring, wall notices, forms and documentation;
- Improvement to foot bath (too small)
- Improvements to control of solid waste;
- Improvements to flow of wash-down water directly into drains;
- The need for all workers handling tuna to wear impervious, clean aprons;
- Some structural issues on maintenance to walls and fittings;
- Ceiling condensation problem;
- Pest control issues (many access points for pests, location of fly-zapper and control of traps);

The list with non-conformances were discussed with both exporters and solutions were proposed. The team of DNL have extensively renovated their factory and by now, all recommendations have been implemented at their factory. Due to the temporally-closure of JAMTi not all improvements have been implemented yet at their facility.

In line with Terms of Reference responsibility number: 25, 26, 27, 28, 29

In line with Recommendation number: 15, 16, 17, 18, 19, 20



6. STUDIES AND ANALYSIS

In line with the Terms of Reference of the Consultant, a number of studies and analysis were made as discussed in this chapter. Smaller studies and reports can be found in the attachments of this report.

VALUE CHAIN ANALYSIS

Attached to this report you find the full value chain analysis that includes all actors in our supply chain (please note that the MS Excel file in the attachments contains two sheets). For this example analysis, we have used the average price tuna fishers receive in Mindoro, and as importer, we have selected Bell.

It is important to note that all numbers are estimates.

Table 2.0: Value chain analysis showing the profit margin per supply chain actor.

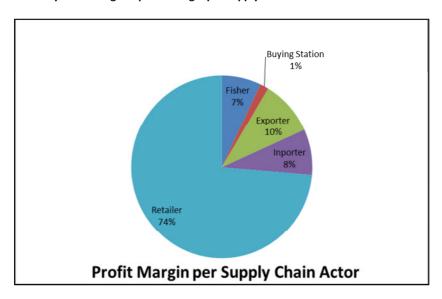


Fig 5.0: Pie chart of the value chain analysis showing the profit margin per supply chain actor.

ESTIMATED VOLUMES FROM THE PROJECT SITES

As a basis for the supply chain work in 2014 an estimate of the volumes of tuna produced at the project sites was made. The full analysis can be found attached to this report.

Table 3.0: Production estimates for the project sites.

| Production Estimates (Ton/year) | Current pro (Raw Ma | | | Production de Fish) | Current Production of (A Grade – Loins) | | |
|---------------------------------|------------------------|-------|------|------------------------|--|------|--|
| | Min. Max. | | Min. | Max. | Min. | Max. | |
| Lagonoy Gulf | 400 | 800 | 180 | 360 | 81 | 162 | |
| Occidental Mindoro | 1,200 | | 600 | 1,000 | 270 | 450 | |
| Total Production 1,600 2,800 | | 2,800 | 780 | 1,360 | 351 | 612 | |

Table 4.0: Detailed production estimated per month for the project sites.

| Current Production A grade Loins (Ton/year) | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Total (Ton/year) |
|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------------|
| Lagonoy Gulf (Min.) | 2 | 2 | 3 | 4 | 5 | 5 | 6 | 8 | 10 | 12 | 14 | 10 | 81 |
| Lagonoy Gulf (Max.) | 4 | 4 | 6 | 8 | 10 | 10 | 12 | 16 | 20 | 24 | 24 | 24 | 162 |
| Occidental Mindoro (Min.) | 15 | 30 | 40 | 50 | 30 | 15 | 15 | 15 | 15 | 15 | 15 | 15 | 270 |
| Occidental Mindoro (Max.) | 25 | 50 | 60 | 75 | 50 | 30 | 30 | 30 | 25 | 25 | 25 | 25 | 450 |
| Total Production (Min.) | 17 | 32 | 43 | 54 | 35 | 20 | 21 | 23 | 25 | 27 | 29 | 25 | 351 |
| Total Production (Max.) | 29 | 54 | 66 | 83 | 60 | 40 | 42 | 46 | 45 | 49 | 49 | 49 | 612 |

^{*} Conservative figures are used: A - Grade Lagonoy Gulf: 0.45, A - Grade Occidental Mindoro: 0.5, Loss during Loining: 0.5

^{*}Projected Production Estimates for the project are estimated by the Consultant in Supply Chain Management for which he used different estimates from both the government and the private sector

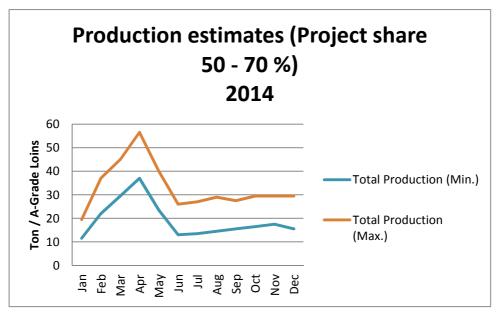


Fig 5.0: total production estimates, with minimum and maximum production figures.

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SUPPLY CHAIN CALENDAR

As a basis for the supply chain work in 2014, a supply chain calendar was prepared. The calendar gives an overview to project partners and project exporters of factors that influence the production of tuna in the project sites:

- Moon cycles;
- Special holidays;
- Peak seasons in the project sites;
- Typhoon season.

The information presented in the calendar provides staff of our project partners with better insights for planning and has led to less miscommunication on the availability of tuna.

The calendar can be found on the USB – memory stick attached to this report.

In line with Terms of Reference responsibility number: 35, 36, 37

In line with Recommendation number: - not applicable -

7. OTHER ACTIVITIES

Other notable activities and meetings conducted by the consultant include:

REVIEW PPTST ACTION PLAN 2014

As agreed during the partner visit in November 2013, I made a thorough review of the PPTST Project Action Plan for 2013/2014 in which I focused on the supply chain related activities as a basis for my new contract. I concluded that all deadlines in the action plan are still valid and that the action plan is a realistic reference to my Terms of Reference and the work plan (version of November 26) serves as an attachment for the new contract.

Two notes from my side:

- The day-to-day activities as outlined in the Terms of Reference are not part of the PPTST Project Action Plan. However, these are thoroughly explained in the ToR's and they cannot be accompanied by deadlines since they are continues activities;
- The analysis assignments as outlined in the Terms of Reference are not part of the PPTST Project Action Plan. Nevertheless, these are accompanied by deadlines in the ToR's.

PARTNER VISIT

Jan Ras visited the Philippines to inspect the progress of the production of frozen steaks. We visited the factory of JAMTi and inspected the product and the on-going production. Jan proposed a few minor chances to the packing procedures. Additionally, all contractual details were discussed and agreed upon.

Besides visiting JAMTi, the factory of JARLA was also visited to discuss the new collaboration for fresh tuna loins between Sea Fresh and JARLA. Initial communication issues were resolved and strategies for supply shortages during new moon were discussed and agreed upon.

Another short visit to DNL was made to discuss the potential for future collaboration between DNL and Sea Fresh.

PARTNER MEETING WITH NEW ENGLAND SEAFOOD (NES)

The Consultant was requested to join the partner meeting at the WWF-Germany office in Hamburg, Germany. The main purpose of the meeting was to further discuss the proposed entry of New England Seafood as partner of the PPTST project.

Over the course of two days, all details of the project were presented and discussed. The Consultant presented an overview of the supply chain, production volumes from the two sites, and potential problems of available tuna in case NES joins the project and demand increases.

Besides joining the meeting in Hamburg, the Consultant also visited the office and factory of Sea Fresh to meet the team of Sea Fresh and to see the actual operations of the company.



SUPPLIER CONTRACTS

New supplier contract have been developed and finalized. DNL and Bell have signed the contract. The other project partners were reluctant to agree with stricter procurement guidelines and no contracts have been signed.

BRUSSELS EXPO GLOBAL

The Seafood Expo Global is the biggest seafood show in the world and since all the project partners and their customers visit this event, it is a good opportunity to update everybody on the progress of the project. The expo also presents a good opportunity for the Consultant to assist project partners in attracting new customers and to introduce the project to government agencies.

The Department of Agriculture and the Bureau of Fisheries and Aquatic Resources of the Philippines did a great job by organizing and funding a large booth to represent the Philippines and its seafood sector. Several tuna exporters that are associated with the WWF- Partnership Program Towards Sustainable Tuna were invited by BFAR to represent their company at the Philippine booth (DNL and Jarla).

VISIT HEADQUARTERS OF BELL AND COOP

The Consultant was requested to give an update of the PPTST project to Reto Kaufmann and his supervisor, Peter Zuercher of COOP during his visit to their headquarters in Basel, Switzerland. With the input of Joann Binondo, a 30-minute presentation was prepared (see the MS PowerPoint presentation attached to this report). General progress on MSC related activities were presented as well as the consultants' progress on supply chain improvements.

After the presentation another 30 minutes were used to answer questions of both Peter Zuercher and Reto Kaufmann. In the discussion, it was furthermore agreed to increase efforts to ensure that in the near future all tuna sold by the project exporters originates from the 2 project sites.

The group also visited several COOP stores as to get a good impression of how the tuna from the project is sold to and received by its customers. The Consultant and representatives from DNL spoke with several employees of COOP. All employees were positive about the product and had no quality complains.

FIGURES FOR POSSIBLE PROJECT EXPANSION.

For the partner call on July 2 2014, it was requested to the Project Manager Joann Binondo, to provide suggestions for additional project sites. The consultant shared the overview, which he presented in the partner meeting in Hamburg, last March. In that overview you find the details of volumes coming from Palawan and General Santos as from a supply chain perspective, the Consultant believes these two sites offer the best grounds for expansion.



PROJECTED AVAILBLE VOLUMES DNL FOR BELL/COOP

An overview with the projected needed volumes by Bell was discussed with DNL. Corresponding available volumes from DNL were discussed and noted in the file attached to this report. The smaller the number of areas from which we source, the bigger the chance that we incur some irregularities in supply caused by the above reasons.

MSC WORKSHOP

Cassie Leisk, engagement Manager of Fisheries Improvement Projects, visited Manila for 3 days in August to teach the PPTST team on the general principles of MSC and on how to use different scoring tools developed by MSC.

The Consultant joined the workshop for 2 days and it was an excellent learning experience.

VISIT PROJECT LEAD

Catherine Zucco visited the Philippines from September 15 to September 19, to prepare a project proposal for 2015/2016. A number of meetings and discussion were organized as to develop the new project proposal and new standards for project reporting.

Additionally, the supply chain proposals for the partner meeting were discussed and improved.

During the visit, supply chain priorities for the last quarter of 2014 were determined and adjusted to current realities as the factory of JAMTi has been closed:

- Until the end of 2014 all boats in the project sites associated with DNL should tag all fish (from 30 kg on) they land;
- Until the end of 2014 at least one exporter will be fully compliant with our traceability system
- Field guide for fishers has been tested and finalized;
- Practical guide for exporters has been tested and finalized;
- A brief one two page analysis of the Traces system used by the exporters and how it compares & whether it complements our traceability system or is rather a parallel /double effort is presented.

PREPERATION OF PROPOSALS FOR PARTNER MEETING

The project has developed quality and traceability standard for the supply chain actors in the project. The next step will be to ensure that all exported tuna has been sourced, handled, and processed using these quality and traceability standards. Therefore, the Consultant has developed a proposal to incorporate a set of Procurement Principles in the supplier contracts between the project partners and the project exporters.



By implementing clear Procurement Principles for the project we:

- Ensure that only legally caught fish from the Fishery Improvement Project are exported by the end of 2014;
- Ensure that only fully traceably tuna is exported which can traced back through each step of the supply chain to the fishing vessel and fishing ground;
- Ensure that only high quality tuna that has been handled correctly throughout the supply chain is exported;
- Ensure transparent and fair pricing mechanism are in place, which will benefit the fishers in the project sites;
- Will motivate exporters to increase their investments in the project sites and their commitment to the project in general;
- Reward supply chain actors (fishers and buying stations) in the project sites for their hard work and commitment, as the demand and thus the price of tuna from the project sites will increase;
- Ensure all major supply chain actors are MSC Chain of custody compliant.

At the request of several project partners, a short overview of the possibilities for project expansion was created and a short report on the potential tariff changes for tuna from the Philippines exported to Europe.

For more information, please see the following reports in the attachment:

- PPTST Overview on options for project expansion;
- PPTST Proposal for procurement principles;
- PPTST Short report on assumed EU GSP Tariff changes Version 2.

In line with Terms of Reference responsibility number: 3, 6, 9, 10, 12, 15, 17, 19, 20, 30, 31, 32, 33, 34

In line with Recommendation number:



MISSION STATISTICS

Some mission statistics are provided in the tables and figures on this page. The number of days sped in the field is skewed towards Mindoro because of volcanic eruption in October in Lagonoy Gulf. Two weeks of fieldwork in Lagonoy Gulf were cancelled and were spend in Mindoro Occidental instead. Without this misfortunate event, the distribution would be 47 vs. 59 (while now it is 33 vs. 73). Two trips were made to Europe, one trip to join the partner meeting in Hamburg, the second trip to represent the project at the Brussels Seafood Expo and to visit the headquarters of COOP and give a presentation to the management.

Table 5.0: Overview of the days of fieldwork.

| Fieldwork | # of visits | # of days |
|--------------------|-------------|-----------|
| Lagonoy Gulf | 4 | 33 |
| Mindoro Occidental | 7 | 73 |
| Europe | 2 | 16 |
| Total | 13 | 122 |

A large number of exporter meetings and visits were conducted. Due to the large size of the factory and diversity of products (frozen steaks etc.) more visits were made to the factory of JAMTi. The factory of Jarla was only visited on very few occasions as their team showed little interest in collaboration or in improving their protocols and set-up. Four joined exporters were conducted as during which all exporters and other stakeholders participated.

Table 6.0: Overview of the number of exporter meetings.

| Exporter Meetings/Visits | # of visits |
|---------------------------------|-------------|
| Jarla | 4 |
| JAMTi | 29 |
| DNL | 23 |
| Joined Meetings | 4 |
| Total | 60 |

Trainings and workshops were conducted in Manila for exporters and government officials of BFAR. The team in Mindoro felt the need for more workshops compared to the team in Lagonoy Gulf, therefor the large number of activities in Mindoro.

Table 4.0: Overview of the number of exporter meetings.

| Trainings and workshops | # activities |
|-------------------------|--------------|
| Manila | 3 |
| Lagonoy Gulf | 6 |
| Mindoro Occidental | 12 |
| Total | 21 |



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At the request of WWF – Philippines, the number of free days and days spend in Palawan (home base of the Consultant) were also recorded as shown in the table below.

Table 7.0: Overview of the number of days spend in Palawan.

| Number of days spend in Palawan | | | | | | | | | |
|---|------------------|------------------|---------------------------|----|--|--|--|--|--|
| Jonah van Beijnen, Consultant in Supply Chain Management, WWF - PPTST | | | | | | | | | |
| Month | Agreed # Days | Actual # Days | Of which # Days worked | • | | | | | |
| November | - | | - | 0 | | | | | |
| December | 5 | 5 | 3 | 2 | | | | | |
| January | 10 | 10 | 4 | 6 | | | | | |
| February | - | 1 | 0 | 1 | | | | | |
| March | - | - | - | - | | | | | |
| April | 3 | 2 | 0 | 2 | | | | | |
| May | 5 | 5 | 0 | 5 | | | | | |
| June | 15 | 12 | 6 | 6 | | | | | |
| July | - | - | - | - | | | | | |
| August | 15 | - | - | - | | | | | |
| September | - | 10 | 5 | 5 | | | | | |
| October | - | - | - | - | | | | | |
| November | - | 1 | - | 1 | | | | | |
| December | 2 | 2 | 0 | 2 | | | | | |
| Total | 55 | 48 | 18 | 30 | | | | | |

SCORING OF ACTIVITIES

Status of Supply Chain related activities using PPTST scoring mechanism

December 2014

The project uses a work plan with log frame to track and record progress made in the project. In this chapter of the final report, the different supply chain related activities that are part of the work plan are scored and evaluated using the projects scoring mechanism and layout.

| Symbol | Meaning |
|--------|-------------------|
| 0 | Finished activity |
| - | On-going activity |

JOINED PROJECT ACTIVITIES COLLABORATION BETWEEN THE CONSULTANT AND WWF - PHILIPPINES

| | Activity | | 20 | 14 | Relative Achievement Status | |
|-------|--|----|----|----|-----------------------------------|------------------------------|
| | | 1Q | 2Q | 3Q | 4Q | (%) |
| 6.1.1 | Develop an EU/BFAR compliant fishing boat to fishers for showcasing during the below training | - | 1 | - | 0 | 50% |
| 6.1.2 | Develop a Catch Documentation Scheme (CDS) in the logbook for fishers | 1 | 0 | | | Adjusted activity 100% |
| 6.1.3 | Training course on quality and traceability training for fishers | - | ı | ı | 0 | 100% |
| 6.1.4 | Assistance in improving traceability standards by Trade Documentation Scheme (TDS) for buying stations | - | - | - | - | Continues 100% |
| 6.1.5 | Assist buying stations by providing clear guidelines and active registration programs | - | 1 | - | - | Continues 50% |
| 6.1.6 | Buying Station Training on Good Manufacturing Practices, Good Hygiene Practices and Traceability | | 0 | | | 100% |
| 6.1.7 | Exporter Training on Manufacturing Practices, Good Hygiene Practices and Traceability | - | 0 | | | 75% |
| 6.1.8 | Fishers Training on Quality and Traceability Follow ups | - | - | - | - | Continues 100% |
| 6.1.9 | Buying Station Follow Up on Good Manufacturing Practices, Good Hygiene Practices and Traceability | - | - | - | 0 | Continues 75% |



Justification for scoring:

| | Justification |
|-------|---|
| 6.1.1 | Field staff in both project sides have received instructions and checklists to identify a suitable "EU Model Boat" and use this during their follow-ups and training with fishers, they have selected boats to serve as example boats in their regular follow-ups with fishers. Additionally, together with the WWF — Yolanda Typhoon team a fiberglass model boat has been conceptualized for 2015. This boat meets all BFAR and EU criteria. |
| 6.1.2 | It has been decided to use the existing version of the BFAR Fish Catch Report and only after permission of BFAR is received an adjusted and improved Fish Catch Report can be developed and implemented. Additionally, field staff and external consultant opted against an additional Catch Documentation System that is not adopted by the national government. |
| 6.1.3 | Fishers and other interested people who will serve as trainers have been trained by the Consultant in both project sites. Now field staff and trainers continue this exercise with additional fishers. |
| 6.1.4 | Buying stations have been advised on what to include in their administration. Additional training, guidelines, and material have been provided to all major buying stations in the project sites. |
| 6.1.5 | The Consultant has given numerous trainings and training materials to field staff and buying stations. Including guidelines on the exact means of how to properly register a buying station and which requirements buying stations need to meet (hands on trainings and inspections and official checklists have been provided). Additionally, workshop and meetings with the LGU's have been organized to ensure proper registration of all buying stations. |
| 6.1.6 | This training has been done in July 2013 and has been repeated again in June 2014 with Steven Roberts with special focus on buying stations. The event was a great success. |
| 6.1.7 | This training has been given by the Consultant and Steven Roberts. Activity has been completed except for the team of Jarla who were not willing to participate. |
| 6.1.8 | Continues activity for which the field staff has been trained and provided with field guides, presentations, video's checklists, and other materials. |
| | Also, over 15 short workshops have been given by the consultant throughout 2014. Last, a wonderful field guide for fishers has been developed which includes all necessary steps that need to be taken by fishers to ensure quality and traceable tuna. |
| 6.1.9 | Continues activity for which the field staff has been trained and provided with field guides, presentations, video's checklists, and other materials. Besides this, the Consultant has made regular follow-ups to all major buying stations to work hand in hand with buying stations to improve their setup and protocols. |
| | Numerous short workshops have been given over throughout 2014. |



PROJECT ACTIVITIES, WHICH ARE THE RESPONSIBILITY OF THE CONSULTANT

| 6.1.10 | Exporter Follow ups on Manufacturing Practices, Good Hygiene Practices and Traceability | - | - | - | - | Continues 75% |
|--------|---|---|---|---|---|----------------------|
| 6.1.11 | Field trip for exporters to facilitate communication with buying stations | | | | | Not relevant anymore |
| 6.1.12 | Establish official framework of collaboration for exporters | | | | | Not relevant anymore |
| | Facilitate communication between both retailers and exporters | - | 1 | 1 | 1 | Continues 80% |
| 6.1.14 | Guidance and assistance in improving traceability standards of exporters | - | 1 | 1 | - | 75% |

Justification for scoring:

| | Justification |
|--------|---|
| 6.1.10 | Continues activity, which has taken place on a weekly basis (visits and calls) for the project exporters. |
| 6.1.11 | This activity was deemed irrelevant in December 2013 before the start of this second assignment as schedules of the project exporters are rather hectic. |
| 6.1.12 | During the first consultancy assignment, the Consultant worked out all the details for a exporter association but little interest was shown by exporters. Therefor the activity was deemed irrelevant in December 2013 by the project management. |
| 6.1.13 | Continues activity, which has taken place on a weekly basis (visits and calls) for the project exporters. |
| 6.1.14 | A Continues activity, which is taking place on a weekly basis (visits and calls) for the project exporters. |

Notes:

The following to variables have led to some delays in the successful completion of the agreed project activities:

- I. Due to the temporarily closure of the factory of JAMTi from July to November and the fact that all staff had been terminated in the process, supply chain improvements activities (staff training, factory improvements etc.) were halted. By late November, the factory regained its operational status and supply chain activities have continued with the new team in charge.
- II. The Team from Jarla has been rather reluctant to collaboration with the supply chain consultant, as they believe their operation already meets all EU requirements. The Consultant has been asked by the project management to let the matter at the hands of the Overall Project Manager for now.



PROGRESS OF SUPPLY CHAIN IMPROVEMENTS PER EXPORTER

| Progress per Exporter | | 2014 | | |
|---|-----|-------|-------|--|
| | | JAMTi | Jarla | |
| Improved traceability system | | 75% | 30% | |
| Improved quality (processing and handling) | | 75% | 30% | |
| Improved food safety requirements (factory setup and protocols) | | 75% | 30% | |
| Total % | 95% | 75% | 30% | |

Justification for scoring:

Justification per Exporter

DNL has been very cooperative with the activities to improve their setup and operational protocols. By now their plant meets all major EU requirements, their processing and food safety protocols are properly in place and their traceability system is for the larger part operation.

Some details still need to be put in place.

JAMTi has been very cooperative with the activities to improve their setup and operational protocols. However, since their organization and factory are larger, more time and effort is needed to make significant changes.

Additionally, due to the temporarily closure of the factory of JAMTi and the fact that all staff have been fired for now, supply chain improvements activities were halted. Since the end of November, the factory regained its operational status and supply chain activities have continued with the new team in charge.

Jarla has recently joined the project and is rather hesitant to change the way she operates. Since she is rather sensitive to the matter, WWF — Philippines has urged the consultant to leave the matter for now, to which the Consultant agreed. Therefore, the scoring is only based on the fact the a collaboration between Jarla and the Consultant has not been possible, therefore the improvement work specified in the consultants ToRs cannot be verified by the consultant. It might be very well possible that the team at Jarla have implemented their own improvements in the mean time.



PROGRESS OF SUPPLY CHAIN IMPROVEMENTS OF BUYING STATIONS PER MAIN MUNICIPALITY

| Buying Station Progress per Municipality | 2014 | | | |
|---|----------|----------|--------|------|
| Buying Station Progress per Municipality | Mamburao | Sablayan | Tabaco | Tiwi |
| Improved traceability system | 95% | 85% | 80% | 60% |
| Improved quality (processing and handling) | 90% | 75% | 70% | 60% |
| Improved food safety requirements (factory setup and protocols) | 90% | 70% | 80% | 60% |
| Total % | 92% | 80% | 75% | 60% |

As implementing agency, the field staff of WWF- Philippines were responsibly for a large number of the major supply chain achievements made in the project. In addition, while the Consultant was instructed the focus on four major sites, the WWF — Philippines field staff replicated the improvements in other landing sites and also continued the improvement work in the main project sites when the consultant was absent for which the consultant is very grateful.

Justification for scoring:

Justification per Municipality

Mamburao: This municipality is by the far the largest landing site of tuna in the project. Therefor initial focus has been on improving all major buying stations in this municipality.

By now all training has been completed, all buying stations have significantly improved their setup and protocols and all buying stations use Tuna Tags (for supply to DNL only).

The WWF supply chain staff now monitor the upgraded systems and make sure the Tuna Tagging system is maintained.

Sablayan: Only DNL acquires raw material from this site.

The lead buying station of DNL has been fully trained in improved traceability and tuna handling ad processing.

Several trainings for fishers and local government officials have been organized as well.

Tabaco: 2 buying stations (DNL and Jarla) by project exporters are operational in this town and both have been improved to meet EU requirements on food safety and hygiene.

Several trainings have been organized and the traceability system has now been implemented.

Tiwi: One larger buying station is operating in this municipality which is working in collaboration with DNL.

A new buying station is being constructed that will meet all requirements. First traceability training has been implemented as well and forms have been distributed.



DISCUSSION AND RECOMMENDATIONS

The supply chain improvements are on track but a number of improvements can still be made. In general, the majority of the current constraints in optimizing the supply chain are related to the general framework of the PPTST project.

General recommendations and discussions:

Not expanding the project has led to increase competition and demand for tuna in the two
project sites. This has led to the construction of more boats, which endangers the
sustainability of the fishery.

General supply chain recommendations:

- It is highly recommended that the Procurement Principles for the PPTST project as developed by the Consultant are implemented by all project exporters. The project management should use these guidelines as minimal requirements for all tuna exported as "project tuna". For now, different project partners adhere to different traceability standards and too much non-project fish is exported as project fish. This endangers the reputation of the project and WWF and most importantly, this undermines the main objective of project. Therefor it should no longer be allowed to export any non-project fish via the project.
- As emphasized since the start of the assignment, it is also highly recommended to expand the number of sites from which project exporters can source. The supply chain aspect of the PPTST project will never be fully functional with the current limitation of two small sourcing sites. The availability of tuna is to unreliable due to the migratory behavior of tuna and the tuna handline fishery is too sensitive to weather related disturbances (typhoons, strong rains, strong currents, high waves, full moon) to be able to meet the requirements of EU retailers in terms of the supply of stable volumes. A total minimum number of four project sites has been proposed.
- To further improve the quality of the tuna landed and to create a traceable fishery, close collaboration with National BFAR is needed. Nevertheless, the project is reluctant in establishing an official collaboration with BFAR (MOA); this significantly hinders progress on improving the supply chain. Nevertheless, without official collaboration framework the project management has been working closer with top-level BFAR officials.
- Except for the fishermen who sell fish to DNL (for delivery to Bell), there is no price advantage for fishers to adhere to the projects standards. Since the other exporters offer no price premium to the fishers as they have monopolized the fishery in Mindoro, exporters actually offer fishers a lower price in the project sites, then compared to the price fishers would receive in other areas. Project partners and project exporters are advised to reconsider and realize that it is very hard to create a sustainable fishery without financial incentives for the fishers participating in the project.



ANNEX 1

ATTACHMENTS

For easy reference and to save paper, all attachments for this report are provided on an USB memory stick, which can be found, attached to this report.

The attachments included on the USB device include:

- 14 monthly reports with all attachments;
- 50 Weekly actual agendas of the Consultant;
- 10 monthly overviews of exported volumes;
- Digital version of the Field Guide to Quality and Legal Tuna for Fishers;
- Poster of Traceability overview;
- Minutes of all exporter meetings;
- All other studies and reports produced.