



REBYC

Reduction of Environmental Impact from Tropical Shrimp Trawling, through the introduction
of By-catch Reduction Technologies and Change of Management
(EP/GLO/201/GEF)

MEXICO

**TRAINING COURSE FOR PROTOTYPE CONSTRUCTION AND
3RD NATIONAL WORKSHOP OF RESEARCHERS
PARTICIPATING IN THE PROJECT**

May 2005



TRAINING COURSE FOR PROTOTYPE CONSTRUCTION AND 3RD NATIONAL WORKSHOP OF RESEARCHERS PARTICIPATING IN THE PROJECT

Inaugural session was held at INP/DGIPPS headquarters in Salina Cruz, Oaxaca, Mexico, with participation of CONAPESCA, Oaxaca State, Technical Schools, Stakeholders and local net makers.

A general overview of the workshop was given and an open invitation was made to all participants to join during prototype construction activities. Afterwards the workshop continued as planned.

Prototype construction

1. General considerations of trawl design.
2. Shrimp trawl behavior and how to achieve operational parameters of design.
3. Analysis of trawl designs (for 4 Mexican Pacific zones and 2 for Colombia).
4. Netting calculation.
5. Knotless netting taping, reinforcing, sewing and rigging.
6. Knotless netting repair

Items 1 to 4 were carried out from 2 to 4 of May, until an agreement was reached concerning main characteristics of trawl designs according to different fishing ground conditions, shrimp/target behavior, type of by-catch and previous fishing experiences in each zone.

And analysis of traditional shrimp trawl nets used in Colombia showed some problems regarding hanging ratio and dimensions of net panels. Although there was not many first hand information concerning fishing ground conditions, target behavior and type of by-catch, it was considered that prototypes proposed by Rafael Basto represent, for the time being, the right approach to start the experimental process.

Derived from analysis and discussion of prototype designs for each zone conditions and main fishing targets, it was decided to use the following trawl nets:

- Zone 1.-** Onboard BIP XI, RS-INP-MEX version 36.6 m (120') of head rope length.
- Zone 2.-** Onboard BIP XII, RS-INP-MEX version 27.5 m (90') of head rope length.
- Zone 3.-** Onboard BIP XI, RS-INP-MEX version 120' with less floatation and reduced side panel's height.
- Zone 4.-** Onboard BIP XII, RS/INP/MEX version 27.5 m (90') of head rope length and reduced side panel's height.

Since first two experimental cruises will cover zones 1 and 2, it was decided to construct two RS-INP-MEX version 27.5 m (90') trawl nets, since INP already has one set of RS-INP-MEX version 36.6 m (120') nets.

For construction of trawls (4 to 9 of May), participants were separated into three groups for cutting, reinforcing and joining panels until both two trawls were finished.



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Afterwards side, head and ground ropes were attached to only one trawl, since there was not enough time to finish both of them.

During these activities, stakeholders and fishermen from cooperatives and private sector participated in cutting, reinforcing and sewing panels; all those participants are eligible to be included in State of Oaxaca Program for Shrimp Trawl Nets Transfer.

3rd National workshop of researchers participating in the project

During this part due to time constraints was only possible to discuss main activities for 2005 and final schedule for experimental fishing cruises. Dates, participants and responsibilities for each planned activity were designated (when possible).

Items 1 to 4 (see Schedule) depend greatly on Simrad's delivery and installation of electronic equipment and are sequential activities. INP will provide on time all support required by Simrad for installation as well as annual maintenance to research vessels in order to be able to sail for experimental cruises on time.

Technical assistance to Latin-American countries have also been scheduled according to preliminary agreements with National Coordinators, INP researchers designated may vary in some cases depending on specific dates and work schedule.

Training course for onboard observers will be carried out in Escuela Nacional de Ingeniería Pesquera facilities, since they have accommodation (house&meals) during summer holidays. Training program and materials are already been produced by a working group and will be ready on time.

Instructors will be selected from workshop participants depending on topics as well as work charges and availability, with support from fisheries biologists for by-catch identification.

Observers program will include both vessels using RS/INP/MEX trawl nets and traditional nets in all fishing zones.

List of participants and photos are included in Annex 1

SCHEDULE FOR THE REMAINING OF 2005

No.	ACTIVITY	DATE	PARTICIPANTS	RESPONSIBLE
1	Installation of Simrad's electronic equipment	<i>f</i> (delivery of equipment ?)		Alejandro Balmori
2	Preliminary tests of electronic equipment	Sequential activity	Alejandro Balmori Andrés Seefoó	Alejandro Balmori
3	Basic training on operation of electronic equipment (40 hours)	Sequential activity	Alejandro Balmori Luis E. Esparza Adauto Flores J. Trinidad Silva Saúl Sarmiento Miguel Angel Flores H. Aarón Gil Andrés Seefoó J. Angel Heredia Jorge Aguilar J. Trinidad Nieto	Alejandro Balmori
4	Advance training on operation of electronic equipment (2-4 weeks)	When Simrad decides	To be defined according to date and compromises	Andrés Seefoó
5	Technical assistance to Latin-American Countries			Ignacio Mendez
5.1	Colombia	June-July	Rafael Basto	Rafael Basto
5.2	Costa Rica	July/August	Saúl Sarmiento & Miguel Angel Flores	
5.3	Cuba	August or October	Andrés Seefoó & Alejandro Balmori	
5.4	Trinidad y Tobago	October or November	Andrés Seefoó & ?	
5.5	Venezuela (Lago Maracaibo)	June	Adauto Flores & Fisherman from Sinaloa	
6	Observers recruitment	May to July		Ignacio Mendez
6.1	North Pacific	May to July	Jorge Aguilar & Luis Esparza	Alejandro Balmori
6.2	South Pacific	May to July	J. Trinidad Nieto & J. Angel Heredia	Saúl Sarmiento

7	Observers training course	End of July	J. Trinidad Nieto Saúl Sarmiento Luis E. Esparza Jorge Aguilar	Andrés Seefoó
8	Characterization of by-catch in four zones during shrimp ban	May-August	Enrique Morales Sebastián Ramos	Donaldo Acal
9	Preparation of experimental cruises	September	Luis E. Esparza	Alejandro Balmori
10	Experimental cruises (4)	September to November	Alejandro Balmori Luis E. Esparza Adauto Flores J. Trinidad Silva Saúl Sarmiento Miguel Angel Flores H. Aarón Gil Andrés Seefoó J. Angel Heredia Jorge Aguilar J. Trinidad Nieto	Alejandro Balmori
11	Observers onboard commercial shrimp fleet	Fishing season 2005-06	Alejandro Balmori & Saúl Sarmiento	Ignacio Méndez
12	Elaboration of national and cruises reports	July/December/January	Alejandro Balmori Luis Esparza Saúl Sarmiento	Andrés Seefoó

ANNEX 1

List of participants

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Fernando Castro Fermin	Local net maker		
Francisco Cadenas Castro	Local net maker		

PHOTOS



Inaugural meeting



Inaugural meeting



Inaugural meeting



Sessions on trawl design



Sessions on trawl design



Sessions on trawl design



Sessions on trawl design



Cutting of netting materials



Cutting of netting materials and reinforcing edges



Reinforcing edges of panel



Stakeholders reinforcing panel edges



Stakeholders reinforcing edges and joining panels



Stakeholder and local net maker joining panels



Preparation of side, upper and lower panels for hanging of lateral ropes



Preparation of side, upper and lower panels for hanging of lateral ropes



Part of Working Group