



**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)

# CUBA

## Progress Report to the Project Coordinator EP/GLO/201/GEF

January-June 2005



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**Country: CUBA**

**Reporting period (January to June/2005)**

**Reporting Officer: Luis Font Chávez – National Coordinator**

### **1. Meetings:**

For fulfill the national project approved for the current year as governmental contribution, the following coordination meetings were held for guarantee the fulfillment established in it:

- Meeting with Manzanillo Enterprise Director in February, for explain the objectives of the project and to incorporate this enterprise to the programmed activities. It was approved a practical activity in relation to the construction of the modified fishing gear in the workshop of this enterprise, two prototype twin nets (Prototype 1) were constructed, which will be used in comparative cruises with the traditional system currently in use in the shrimp fishery. These cruises will be performed after the seasonal closure in November.
- Meeting with Santa Cruz del Sur Enterprise Director in April with the agreement to perform comparative trials on board the vessel Ferrocement 26 equipped with traditional and modified (Prototype 2) nets in the same month of April and July under commercial conditions.
- Meeting with Santa Cruz del Sur Enterprise Production Direction, to guarantee the requirements needed for the possible visit of the Mexican specialists (personnel, ship and traditional gears) in October, having in mind that the fishery is under a seasonal closure. Also, with the same objective, coordination was established with the Sub director of PESCACUBA Holding, which is responsible of the shrimp activity in the country.

### **3. Progress of each activity:**

Two modified nets (Prototype 2) were designed and constructed introducing some constructive modifications with the objective of obtain better results in shrimp catches, as an alternative for compensate the economical losses derived from the use of escaping devices for fishes on the revenues of the crews of the shrimp fleet. Twenty two trawling stations were performed under commercial regimen (2 ½ hours duration trawls). Their preliminary results from the cruise in June are satisfactory, and they continue fishing in a commercial vessel under the skipper supervision, which reports daily the catch by system with similar results.

The technological parameters (Prototype 2), are shown in Figure 1 and Table 1.

Figure 1. Scheme of the net.

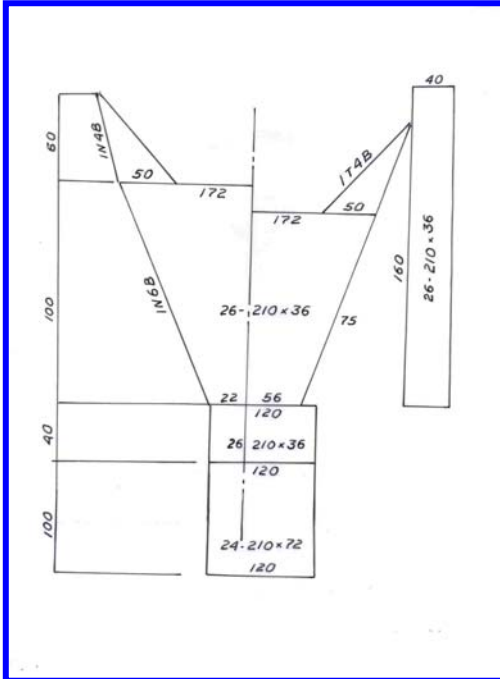


Table 1. Technical characteristics.

Headline length	10.5 m
Trawl net length	8.3 m
Horizontal opening	7.4 m
Area of net mouth	8.3 m <sup>2</sup>
Swept area	11.4 m <sup>2</sup>
Volume of filtered water	12.8 m <sup>3</sup>
Hydrodynamic resistance	808 kgf

This prototype will be used in the trials performed during the visit of the Mexican specialists and later on a commercial vessel after the finishing of the seasonal closure, equipped with "fish eye" escaping device of 23.0 x 47.5 x 40.0 cm.

#### 4. Workshops, training, or demonstration activities undertaken.

In February, the personnel of the fishing gear workshop of Manzanillo Enterprise were trained in the construction of modified shrimp twin gear and the use of escape devices (Figs. 2 and 3). Two twin gears were constructed, which will be used on a vessel from this enterprise in future date after the closure, to perform comparative trawling with the fishing system used in this region and equipped with escaping devices.



Figures 2 and 3. Construction of modified twin gears in the fishing gears workshop in Manzanillo Enterprise

## 5. Current status of the shrimp-trawling industry. Year 2004

Table 2. Shrimp fishery statistics

<b>By catch (t) landings</b>	<b>4461.8</b>
<b>Shrimp landings (t)</b>	<b>1439.3</b>
<b>Fishing effort (fishing day)</b>	<b>8769</b>
<b>c.p.u.e. (kg/fishing day)</b>	<b>164.1</b>
<b>By catch/shrimp relationship</b>	<b>3.1</b>

## 6. Financial inputs by government.

Table 3. Breakdown of expenses

<b>Professional staff</b>	<b>10287.57</b>
<b>Materials</b>	<b>782.08</b>
<b>Travel expenses</b>	<b>1938.50</b>
<b>Other expenses</b>	<b>1953.28</b>
<b>Operation expenses</b>	
<b>Administrative expenses</b>	<b>10736.31</b>
<b>Total</b>	<b>25697.74</b>

In relation with the financing received from project funds, the execution have been low, due to problems in the approval of the modification proposal, which was approved in February and, as a consequence, delayed the purchase of the truck, which is indispensable for the development of the activities of the project by one side, and by the other, there are troubles for the acquisition of equipment (dynamometers, scales, etc) by lack of suppliers.

**Table 4. Current status of the funds provided by FAO**

<b>Description</b>	<b>2004-2005</b>	<b>Allocated</b>	<b>Used</b>	<b>Available</b>
<b>Consultants</b>	21 000,00	0,00	0,00	0,00
<b>Travel</b>	4 000,00	4 000,00	0,00	4 000,00
<b>Expendable Equipment</b>	18 300,00	13 505,00	876,15	12 628,85
<b>Non Expendable Equipment</b>	33 050,00	46 900,00	3427,27	43 472,73
<b>General Operating Expenses</b>	37 050,00	23 952,00	8 574,98	15 377,02
<b>TOTAL</b>	113 400,00	88 357,00	12 878,40	75 478,60

#### **7. Estimation of by-catch reduction:**

No vessel is currently equipped with BRDs in the commercial fishery.