

**BRIEF ON CURRENT FISHERIES ACTIVITIES**

**RE: MINISTERIAL TOUR - NIKUNAU, TAMANA & ARORAE**

**NIKUNAU**

At present there is no Fisheries Assistant on the island. Posting of Senior Fisheries Assistant Teemang Tebateki is scheduled in mid March. On going activities and future programmes are described below.

**Fishing Gear Sale**

Since the inception of the Project in 1983, fishing gears were ordered in bulk and distributed on a credit basis to the outer islands through our Fisheries Assistants. With this system Fisheries have encountered a continuous shortage of fishing gears which were due to insufficient cash in hand to pay for overseas orders.

To ease the problem, a new system was implemented whereby gears are issued to fishermen on a cash payment basis. Fishermen will send their telmo to headquarter for the required gear and Fisheries Division will be responsible to airfreight these items. It is anticipated that with this new system shortage of fishing gear will be solved.

Allocation of shares of fishing gears to all islands is based on the population density. Thus Nikunau has a share of 3.3% of the fishing gears ordered from overseas. Below are the gears sent to this island this year.

**Fishing Gears sent to Nikunau:**

| <u>Item</u>          | <u>Quantity</u> | <u>Price</u> | <u>Total Value</u> |
|----------------------|-----------------|--------------|--------------------|
| 1. Mononet 2 1/4"    | 5               | 20.00        | 100.00             |
| "    2 1/2"          | 5               | 19.00        | 95.00              |
| 2. Monoline 35 lbs   | 2               | 11.00        | 22.00              |
| Monoline 140 lbs     | 2               | 12.00        | 24.00              |
| "    200 lbs         | 2               | 12.00        | 24.00              |
| "    320 lbs         | 2               | 12.00        | 24.00              |
| 3. Multitwine 210d/6 | 10              | 5.50         | 55.00              |
| Mask @ 13.00         | 3               | 13.00        | 39.00              |
| Double Hook No.5     | 100             | 0.45         | 45.00              |
| B.K.N. No. 32        | 100             | 0.18         | 18.00              |
| "    No. 26          | 100             | 0.13         | 13.00              |
| "    No. 24          | 100             | 0.12         | 12.00              |
| "    No. 22          | 100             | 0.11         | 11.00              |
| KSH No. 9            | 100             | 0.02         | 2.00               |
| No. 7                | 100             | 0.02         | 2.00               |
| No. 11               | 100             | 0.02         | 2.00               |

Fish Aggregating Device (FAD)

A total of 4 FADs have been deployed on the island up to October 1991. However, early this year, these FADs were reported missing by the Deep Bottom Fishing team during their recent visit. FADs can be replaced, provided a requirement from the Island Council is submitted to the Fisheries Division.

Deep Bottom Fishing

The visit to the island to conduct training on deep bottom fishing was finally made in January, 1992 by a team from Fisheries which consisted of Rimeta Tinga (Ag. F/O) and Kamori Ueantabo (FA). The training is an important contribution towards preparations prior establishment of an ice plant on the island. The training would hopefully enable fishermen to diversify their fishing operations especially during periods of tuna off-season when catches for trolling are poor. By diversifying fishermen's fishing operations a constant supply of fish will be available to the local populace.

The visit became the eleventh in a series of visits to the outer islands since the deep bottom fishing project started.

During the visit four aluminium boats were rigged each with one set of deep bottom fishing gear. Each set consists of two handreels, one anchor, anchor rope, anchor buoy, some hooks, trace wire and monoline. The gears were used during the training programme and later purchased by boat owners at half price at the end of the programme. The reason being that the owners should submit to Fisheries records of all catch landings made by deep bottom fishing after the team left.

The selection of four boats was made by the island FA (Takenteata) on arrival. The reason was that no fishermen nor boats registered their names with the island council to receive training, although the council had informed villagers of the proposed visit. The fishermen said they already know about deep bottom fishing and that they do not see any need to be trained.

The training started on 16th January and ended on 27th January. Components of the training consisted of the on-shore and at-sea training, the former being conducted at the Boboti resthouse which lasted one day and the latter along the outer-reef slopes of the island and lasted five days.

Fishing was targeted at deep water species found at 80-200 metres during daytime only at different fishing areas viz;

- south to east and south to west of Tabomatang village,
- west of Muribenua village,

east of Muribenua, Rungata and Manriki villages.

The total catch landed during the training was 610.15kg (277.31lbs) of both shallow water and deep bottom fishes from eleven fishing trips. The catch was caught from an estimated fishing effort of 80.5 reel-hrs, giving an average catch rate (in terms of catch per unit of effort) of 7.6kg/reel-hr.

The catch was composed of eight species of shallow water species and twelve species of deep water fishes.

The team found out that the catch rate by deep bottom fishing using handreels was relatively high with good fishing areas off the northern, and southern points of the island as well as on the eastern side. The deep bottom fish resources have a potential for exploitation as it had not been utilised commercially before.

At the end of the training and before the team left, landings of deep bottom fishes were substantial such that other fishermen and boat owners expressed their interest in obtaining the deep bottom fishing gear set. A full set roughly cost \$230, however it can be less depending on the fishermen's requirement. Orders can be made through the stationed Senior Fisheries Assistant.

#### Pond Development

Problem with tilapia still exist. Fisheries Division have assisted the council in trying to eradicate Tilapia. Initially have tried poisoning the pond with the chemical 'rotenone' with unsuccessful result. At the beginning of 1991, live travellies (rereba) were introduced in ponds to control the tilapia population and hopefully in the long term it would have a substantial effect. Another step in controlling the tilapia population is to create tilapia free nursery pond. These will be used to raise milkfish fry to fingerling sizes where they will not be eaten by tilapia and later used for restocking the major pond.

#### Fisheries Artisanal survey

This survey was conducted by members of the Statistical Unit in May 1991. The aim of the survey is to monitor changes in the structure of the artisanal catches in relation to the increasing population. It will also provide baseline information for fisheries development projects and other related fisheries

activities.

The next visit is scheduled in 1995.

### TAMANA

At present there is no Fisheries assistant stationed on the island. Immediate plan to post a fisheries Assistant is not yet decided.

#### Deep Bottom Fishing

A visit by the SPC master fisherman was made in 1984 mainly to survey the deep bottom fishes and introduce the use of handreels. Catches were very low compared to other islands visited. A revisit to island by the Fisheries Deep Bottom Fishing team is scheduled sometimes this year. This time, the fishermen will be trained on the use of Kiribati model canoe utilising the Samoan hand reel. Result obtained will be compared to that conducted in 1984, thus evaluation and assessment on the potential of the deep bottom fishing can be made.

#### Fishing Gear Sales

Despite the non existence of Fisheries Assistant on the island, Fishing Gears are still being sent to the island. Below is the list of Fishing gears sold to the fishermen on the island this year. Like the rest of the islands, Tamana get a share of all fishing gears ordered from overseas.

#### Fishing gears issued to Tamana:

| <u>Item</u>         | <u>Quantity</u> | <u>Price</u> | <u>Total Value</u> |
|---------------------|-----------------|--------------|--------------------|
| 1. Kirby hook No.13 | 2000            | 0.02         | 40.00              |
| 2. Kirby hook No.15 | 2000            | 0.02         | 40.00              |
| 3. Kirby hook No.11 | 1000            | 0.02         | 20.00              |
| 4. B.K.N hook No.24 | 100             | 0.12         | 12.00              |
| 5. B.K.N hook No.26 | 100             | 0.13         | 13.00              |
| 6. B.K.N hook No.32 | 100             | 0.18         | 18.00              |
| 7. Double hook No.5 | 100             | 0.45         | 45.00              |
| 8. Multitwine       | 2               | 5.50         | 11.00              |
| 9. Swivels 60 gms   | 2               | 0.50         | <u>1.00</u>        |
|                     |                 |              | <u>200.00</u>      |

A list of the current stock at Tanaea Gear Store is usually distributed to the Clerk to the Island Council, especially on islands where no FAs are posted. Fishermen can then order their gears by sending money orders to Fisheries Division in Tanaea. Again these required gears would be airfreighted to the concerned fishermen upon receipt of payment.

#### FADS

A total of three FADs have been deployed. Two deployed in 1990 and another one in 1991. Reports from fishermen and the F.A stationed earlier showed good fishing around the FADs. In July 1990, one FAD was reported missing, only three weeks after deployment. In September the same year another FAD was again deployed. Future requirements can only be deployed upon receipt of the Island Councils' request.

#### ARTISANAL SURVEY

This was conducted in 1989 and a revisit is scheduled this year. The aim of the survey is to monitor changes in the structure of the artisanal catches and will also provide baseline information for fisheries developments for the island.

#### ARORAE

Fisheries Assistant Tikarerei Mwea is presently stationed on the island. The following are the current and ongoing fisheries activities carried out by the Fisheries Assistant:

- Data collection
- Pond development
- Milkfish fry survey, and
- Fishing gear sales.
- Other Fisheries related activities

#### POND DEVELOPMENT

The FA is actively involved in assisting the council develop their pond production. This actually started off in 1990 with 500 fingerlings supplied from the Temaiku Fish Farm. Reports indicated slow growth rate as it took more than a year before the first harvest was carried out. There is plan to expand the pond if the pond is to be stocked with more fingerlings supplied from fish farm Temaiku. The stationed FA still continues with the milkfish fry survey on the island for restocking of Island Councils' pond.

### FISHING GEAR SALE

As supplied to other islands, fishing gear sale is performed on a cash payment basis. Fishermens' requirements is relayed by the F.A. and upon receipt of cost of the required fishing gears, these will then be airfreighted to the F.A. who would then distribute them accordingly. Arorae gets a 2.3% share of the fishing gear ordered from overseas.

Below are the fishing gear sent this year;

| <u>Items</u>       | <u>Quantity</u> | <u>Price</u> | <u>Total value</u> |
|--------------------|-----------------|--------------|--------------------|
| Mononets 2 1/4 "   | 2               | \$20.00      | \$40.00            |
| Leads 25 grms      | 60              | \$40.00      | \$40.00            |
| Monolines 15 lbs   | 4               | 0.05         | \$ 3.00            |
| Multitwine 210 d/6 | 10              | \$ 5.50      | \$55.00            |

### DEEP BOTTOM FISHING

The same SPC team who visited Tamana also visited the island in 1984. Low catches was recorded. A revisit by the Fisheries Deep Bottom Fishing team is scheduled before the end of this year to introduce the modified Kiribati model canoe utilising the Samoan SPC hand reel.

As normally carried out on the outer islands already visited the Deep Bottom Fishing team would only work with those fishermen who own skiffs and outboard boats. If such vessels are not available locally, the Fisheries Team would provide a KIR 4 model to be used during the demonstration.

### ARTISANAL SURVEY

The survey was conducted in 1989 and a revisit is scheduled this year. The aim is to provide information on changes in the structure of the artisanal catches and form baseline information for fisheries developments

### FADs

A total of three FADs have been deployed. One deployed in 1990 and another one in 1991. Deployment was carried out using the Fisheries Extension/Research vessel "Nei Tewenei". Reports from

fishermen and the FA stationed on the island indicated good fishing around FADs.