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BENEFITS OF CO-OPERATIVE EFFORTS IN FISHING AND CATCH DISPOSAL SYSTEM AT VERSOVA, MAHARASHTRA*

Versova is a major centre of fishery activities in the district of Greater Bombay in Maharashtra and it is the largest among 23 fishing villages of the district. One characteristic feature of the fisher folks of the village is their high degree of mutual co-operation and help which has resulted in the development of a unique system of fish catch disposal.

A careful study of the fish catch disposal system at Versova revealed the following benefits:

- i) Conservation of fuel and savings in the fuel cost;
- ii) Best utilization of human resources;
- iii) Quick and proper disposal of catch in fresh condition and
- iv) Freedom from the clutches of money lenders, merchants and middle men.

The co-operation among the fishermen starts even before the fish is caught and continues till the catch is disposed of in the market. The following

case study of *dol* net will reveal how their co-operation works for the benefit of the whole society.

The *dol* net is the main fishing gear of the Versova fishermen and is operated throughout the fishing season which commences from mid-September and lasts upto June. This is a bag net of fixed type and is operated with the help of a boat utilising tidal force as well as trained manual labour. The operation is carried out at different depths varying from about 9 to 36 m.

The *dol* fishermen form groups to operate at three to four stations at different depths, and throughout the year these groups stay together. Normally each group has four boats with it.

Baskets of different groups bear different markings and can be identified easily (Fig. 1). After 24 hours of fishing one boat collects the catches from all the boats and brings them to the landing centre.

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TABLE 1. Comparison of the savings by group fishing boats and single fishing boats from October 1991 to June 1992

	October 1991	November 1991	December 1991	January 1992	February 1992	March 1992	April 1992	May 1992	June 1992	Total
(A) 40 ft. Group fishing boats (24 boats in 6 groups of 4 boats each)										
Total catch (kg.)	550950	229200	255151	262500	228032	187164	273064	228912	70872	2285845
Catch value (Rs)	1177500	654000	803933	86400	797160	70290	1129067	104880	273600	7457350
Fuel cost (Rs)	178200	204120	230640	252320	222376	271080	269004	300578	72720	2001036
Total profit (Rs)	999300	449880	573293	611680	574784	438210	860063	702624	200880	5410714
No. of hauls	2880	2880	2974	2880	2688	2592	2784	2880	576	23134

(A) 40 ft. Single fishing boats (24 boats operating separately)

Total catch (kg)	347160	177570	153843	136620	96992	114912	128064	117744	45912	1318817
Catch value (Rs)	811500	424500	509640	557400	428680	474660	587347	616800	187200	4597727
Fuel cost (Rs)	201600	204120	230640	248760	219576	273780	265911	303792	72960	2021139
Total profit (Rs)	609900	220380	279000	308640	209104	200880	321436	313008	114240	2576588
No. of hauls	1440	1440	1488	1440	1344	1296	1392	1440	288	11568

Total profit of group fishing boats/total profit of single fishing boats =Rs. 5410714/Rs. 2576588= 2.10.

The profits of group fishing boats are 2.10 times more than the single fishing boats.

(B) 50 ft. Group fishing boats (24 boats in 6 groups of 4 boats each)

Total catch (kg)	667350	391800	403785	378700	310072	283230	388445	519084	126096	3468562
Catch value (Rs)	1746000	1272000	1262733	120600	926800	1105920	1595000	1747200	460800	10237053
Fuel cost (Rs)	245700	231300	299336	353200	440160	437130	398924	441696	97128	2944574
Total profit (Rs)	1500300	1040700	963397	852800	486640	668790	1196076	1305504	363672	8377879
No. of hauls	2880	2880	2976	2880	2688	2592	2784	2880	576	23136

(B) 50 ft. Single fishing boats (24 boats operating separately)

Total catch (kg)	423990	260440	238039	231960	169624	161892	201531	300186	171864	2160116
Catch value (Rs.)	1242000	912000	865933	678000	565600	668250	792667	984000	249600	6958050
Fuel cost (Rs.)	245700	247200	331080	344960	440160	436320	398537	446256	97608	2987821
Total profit (Rs.)	996300	664800	534853	333040	125440	231930	394129	537744	151992	3970228
No. of hauls	1440	1440	1488	1440	1354	1296	1392	1440	288	11578

Total profit of group fishing boats/total profit of single fishing boats = Rs. 8377879/ Rs. 3970228 = 2.11.

Total profit of group fishing boats are 2.11 times more than the single fishing boats.

The members of the fisherman families identify their baskets by the markings and take their respective baskets either for drying the catch or to the market. The other boats of the group are sent back to the landing centre in rotation according to a scheduled programme and they return to the

fishing station with requisite quantity of drinking water, food, oil and other necessary articles.

An evaluation of the profit by group fishing boats, compared to the individual boats, during a period of nine months was made at Versova based

on fuel cost and catch value. For comparison, six groups having four boats (40 ft and 50 ft) each were identified. Comparison was made with the profit of equal number of single fishing boats.

Results indicated that profit of the boats operating in groups was 2.10 and 2.11 times more for 40 ft and 50 ft boats respectively (Table 1). The reason for this double profit is the pooling of the human resources by the groups which enable them to take more number of hauls and also to save upon the fuel cost.

The system works even better on land. There are three transport societies now and these have



Fig 1. Baskets with markings for identification

changed the earlier scenario when the fishermen were virtually exploited by the middle men. As transportation charges were almost double in earlier days and vehicles were not moving from landing centre till they were full with the catch, the catch was not reaching wholesale or retail market in time and the fishermen were prone to exploitation. Since these societies have the facilities of cold storage and ice plant, it is ensured that no catch is lost even if there is a delay in transportation.

Marketing of the catch is done at the Shivaji Wholesale Market at Bombay through a fresh fish stall of the society. Complete account is maintained neatly even in the absence of the fishermen, and money due to the market basket is credited to the account of the respective basket owner.

In addition to this, some retailers are having some sort of understanding with fisher folk to collect their baskets with markings from the trucks and sell the catch on 10% commission basis. This saves the time of the fisher folk which they utilize mainly for the processing of other fishes.

The whole system is organised in a disciplined manner with the full co-operation of all its members; ultimately saving lot of their energy, time, fuel and money for increased profit.