

## **An assessment of socio-economic impacts of Dikkowita harbor on fisher-folks in Dikkowita**

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### **Abstract**

Dikkowita harbor was built with the intension of supporting a high sea fleet. However, there can be both positive and negative impacts on fisher-folk due to the construction of this harbor. Therefore, main focus of this study was to investigate the socio-economic impacts of the harbor development project on the fisher-folks. A questionnaire survey was conducted in April, 2014 to collect primary data from a purposive sample of 80 people including fishermen, boat owners etc while interviewing five staff members of the harbor. Fishers' perception were measured using a Likert-scale ranging from Strong agree (5) to Strongly disagree (1). Data were analyzed using non parametric statistics in SPSS 13.0. Findings revealed that fisher-folks are highly satisfied with the equipment and facilities available at Dikkowita fisheries harbor. The construction of the harbor has increased the anchorage facilities for the fishers ( $z=-7.875$ , mean=4.40,  $p<0.05$ ). The harbor has facilities for getting inputs for fishing operations such as ice, fuel, drinking water ( $z= -7.921$ , mean= 4.48,  $p<0.05$ ). Although, ice plants are available sometimes fishers are unable to get in sufficient quantity ( $z= -6.068$ , mean= 4.02,  $p<0.05$ ). It includes storage facilities for fish harvest ( $z= -7.842$ , mean= 4.50,  $p<0.05$ ), facilities for fish selling ( $z= -7.891$ , mean= 4.52,  $p<0.05$ ) and fish net repairing facility ( $z= -7.835$ , mean= 4.48,  $p<0.05$ ). This harbor construction has created new employment opportunities for the community ( $z= -7.852$ , mean= 4.52,  $p<0.05$ ). Nevertheless this harbor development project has created some problems for single day boat owners for their fishing operations ( $z= -6.505$ , mean= 4.66,  $p<0.05$ ) and selling ( $z= -6.199$ , mean= 4.11,  $p<0.05$ ). Accumulation of pollutants ( $z= -6.345$ , mean= 4.16,  $p<0.05$ ) and sand ( $z= -6.696$ , mean= 4.50,  $p<0.05$ ) in the harbor basin are problems that would need adequate solutions. In conclusion, benefits of Dikkowita harbor establishment overweight the disadvantages associated with the harbor.

**Keywords:** Dikkowita harbor, high sea fleet, fishers, socio-economic impacts

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### **Introduction**

Currently there are 12 fishery harbors in Sri Lanka. Three fishery harbors are under construction; Hambantota, Ambalangoda and Chilaw. In addition there are 35 anchorages and about 600 minor fishing centers in Sri Lanka. However, there are low facilities to catch fish in high sea. New fishery harbor built at Dikkowita with the intension of providing supports for the high sea fleets (Ten year development plan 2007-2016, MFAR). Sri Lanka caught high sea tuna in 2006 via 11boats and in 2013

there were 63 boats and in 2016 the target boats will be 114 boats and the development of the high sea fishing by providing the harbor facilities to the large vessels in Dikkowita harbor. However, there can be both positive and negative impacts on fisher-folk due to construction of this harbor. Therefore, main focus of this study was to investigate the socio-economic impacts of the harbor development project on fisher-folk.

### **Materials and Methods**

A survey was conducted in Dikkowita fisheries harbor in April, 2014 to collect data from fishermen. A purposive sample of 80 respondents including fishermen, boat skippers, helpers, boats owners of multiday boats and five staff members of the harbor were interviewed to measure the perceptions towards the socio economic impacts. Structured questionnaire was used to collect primary data during the survey. A Likert-scale was used to measure the items which were ranging from 'Strongly agree' (5) to 'Strongly disagree' (1). Research papers, journals and internet were used to collect secondary data. Data analyze was done using SPSS 13.0 by performing descriptive statistics and some non-parametric statistics such as, Wilcoxon test

### **Results and discussion**

Findings revealed that fisher-folks are highly satisfied with the equipped facilities and equipments provided in Dikkowita fisheries harbor (see Table 1). The construction of the harbor has increased the anchorage facilities for the fishers. The harbor has facilities for obtaining inputs for fishing operations such as ice, fuel, drinking water. Although, ice plants are available sometimes fishers are unable to get in sufficient quantities. It includes storage facilities for fish harvest, facilities for fish selling and fish net repairing facility. This harbor construction has been created new employment opportunities for the community. Nevertheless this harbor development project has created some problems for single day boat owners for their fishing operations and selling. Accumulation of pollutants and sand in the harbor basin are another problems associated with the harbor.

Table 1: Results of the Wilcoxon signed rank test for fisher-folk perceptions' towards the Dikkowita harbor construction

Variable	Mean	Z-Value	Remarks
Increase facilities to anchor the vassels	4.40	-7.875*	Agree
Ability to get water,ice,oil,drinking water	4.48	-7.921*	Strongly Agree
Facilities to sell fish harvast	4.52	-7.891*	Strongly Agree
Store the fish harvast	4.50	-7.842*	Strongly Agree
Ability to repair the vassels and fishing gears	4.48	-7.835*	Strongly Agree
Genearate of new job opportunities	4.52	-7.852*	Strongly Agree
Develop the influstructure facilities in the harbor and out of harbor	4.56	-7.893*	Strongly Agree
Harber granages system workin efficiency	4.55	-7.736*	Strongly Agree
24 hours security system	4.56	-8.037*	Strongly Agree
Issue of geting ice	4.02	-6.068*	Agree
Obstacles for fishing operation of oneday fishing vessels	4.66	-6.505*	Strongly Agree
Extra expenditure to remove sand	4.50	-6.696*	Strongly Agree
Collcet the environment polution	4.16	-6.345*	Agree
Decrese the selling of one day boat fishers	4.11	-6.199*	Agree
On sale inside of the harber	4.00	-5.803*	Strongly Agree

Geting services of the out side of harber geting trouble if he is not a fishermen	3.47	-3.113*	Neither agree or disagree
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\*significant at  $p < 0.05$

Source: Field survey, 2013

### **Conclusion**

The benefits of the Dikkowita fisheries harbor quite override the disadvantages associated with the harbor. However, necessary actions should be taken to solve the shortage of ice production and pollutants accumulation problem to enhance the efficiency of the harbor services.

### **References**

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