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Ullah, Nazim and Uddin, Md Akther

INCEIF, Kuala Lumpur, Malaysia, INCEIF, Kuala Lumpur, Malaysia

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A Social Business Model for Poverty Alleviation through Collecting & Merchandising of Dry Fish: A Case Study from Bangladesh

Nazim Ullah¹

Md Akther Uddin²

INCEIF, Kuala Lumpur, Malaysia, INCEIF, Kuala Lumpur, Malaysia

Abstract

Maheshkhali is an Upazila of Cox's Bazar District in the Division of Chittagong, Bangladesh and there are about 300,000 people in this island. About 21.2% of the populations of Maheshkhali are living below lower poverty line and most of them are directly or indirectly employed in collecting, merchandising and exporting of salt, shrimp, sea-fish and dry fish. In the recent past, various development programs have been undertaken to eradicate poverty in this island but failed to reach to the poorest of the poor effectively due to various reasons, especially exploitation by money lenders and NGOs is considered to be the key. Dry fish processing is one of the major industries of Maheshkhali and there exist a growing demand of dry fish in local market and international market. The study is analytical in nature and based on secondary data collected from available published sources. We propose a social business model that will enable the root level dry fish processor to get benefit from their dry fish production by eliminating intermediaries with the help of latest information and communication technology which will ultimately help in reducing hardcore poverty of Maheshkhali Island.

Keywords: Poverty Alleviation, Dry Fish, Social Business, Information and Communication Technologies (ICTs)

¹ Graduate student in Islamic finance at INCEIF, Lorong Universiti A, 59100 Kuala Lumpur, Malaysia.

² **Corresponding author,** Graduate student in Islamic finance at INCEIF, Lorong Universiti A, 59100 Kuala Lumpur, Malaysia. Phone: +6 01112549795 Email: 1400225@student.inceif.org

1. Introduction

In Bangladesh there are about 7.3 million people live in the coastal fishing villages whose livelihood in some way depend on coastal and marine fishing. It is estimated that about 20 percent of total marine catch has been dried round the year with the substantial production during October to April and marketed both in domestic and international market (Shamsuddoha, 2007). Amin, Islam, and Hossain (2012) showed that dry fish processors are getting 5-17% profit margin whereas Shamsuddoha (2007) identified that primary producers are having only 5-8 % profit considerably less than wholesalers (90-109%), and supermarkets (150%). The major cause of price exploitation to the producers is 'dadan', which can be defined as a non institutional money lending, that make producers bound to go for 'conditional engagement' in the fish drying business. Therefore, these monopolistic and manipulative practices by both the wholesaler and super markets are not curtailed by any countervailing power of the producers (Alam and Das, 1999; Shamsuddoha, 2007). The price increases nearly double from producer to consumer. Processors and intermediaries face various problems like inadequate capital, natural calamities, lack of scientific knowledge and technology, price instability, transport facilities, inadequate storage facilities, physical marketing facilities and marketing information (Amin, Islam, & Hossain 2012). So, the benefits of dry food industry vary at different backward and forward stakeholders and are not changing the living standard of the poor fishermen and laborers of coastal region of Bangladesh.

Social responsibility of a firm differ from the concept "Social business Enterprise" introduced by Dr. Muhammad Yunus. A firm is not being socially responsible if it merely complies with the minimum requirements of the law, because this is what any good citizen would do. A profit maximizing firm under the rules of classical economics would do as much. Social responsibility goes one step further. It is firm's acceptance of a social obligation beyond the requirements of the law (Davis, 1973). It means, in case of social responsibility a firm is doing something more than required by law where as Dr. Yunus in his concept of social business focuses on the objectives of the business that should be cause-driven rather than profit-driven, with the potential to act as a change agent to the world by solving different social and environmental problems that may be run by professional managers which is significantly different from NGO's and Charity (Yunus, 2007). He characterized a social business as a no-loss, no-dividend business that will be constructed by interested investors of such kind and that will facilitate the targeted group of beneficiaries. This paper focuses on

developing a social business model that makes the root level fish manufacturer able to produce dry fish under a social business platform and have the fruits of their labor through eliminating intermediaries by using the latest information and communication technologies (ICTs) for reducing severity of poverty in Maheshkhali Island.

Drying of marine fish is very common in the entire coastal areas of Bangladesh and dry fish have great demand both in domestic and international market but it characterizes poor product quality and poor market access due to various institutional and non- institutional barriers e.g. high transportation cost/toll/taxation, price exploitative market players between producers and consumers. In relation to dry fish export, the increasing non-tariff measures (NTMs) acts as a critical barrier despite having huge international market demand and prospect and also identified, dry fish are produced mostly in traditional way; dipping fishes in saline water, drying in open places and, very often, using pesticides to prevent pest infestation. So, traditional dry fish producers are out of export market as they could not meet the Sanitary and Phytosanitary (SPS) measures (Shamsuddoha, 2007).

In this paper a humble attempt has been made to analyze the scenario of improving poverty condition of the root level dry fish producers through synthesize implementing an Internet Based Social Business Model to be applied for dry fish Business in Maheshkhali Island, Cox's bazar, Bangladesh. Firstly, identify the various reasons of vicious cycle of poverty conditions which are not changing over the years. Secondly, describe present financing and supply chains that are leaking the root level dry fish producers in the study area, and finally, propose a social business model to eliminate intermediaries and provide fair value to the dry fish producers.

This paper is divided into four sections. In the second section we are going to discuss the methology, followed by results and discussion and finally conclusion.

Methodology

Descriptive research has been conducted to perform this study. Consequently, the research technique has relied on secondary data, collected from case studies, Journals, Research articles, thesis papers, Bangladesh agricultural census, newspapers, online news and survey reports, and yearly report and files of the organization of the fisheries that have already been interpreted by various researchers. Sometimes primary data collected by authors is also used along with the secondary data.

2. Financing system at dry fish industry

The majority of dry fish producers are from low income group and highly indebted, to keep touch with money lenders namely, 'dadan', 'mohajan', 'aratdar', influential and rich fishing vessel owner and NGOs. The laborers of the Maheshkhali Island work either as contract labor or contract producer who sold their product before hand against taking of advance money in the loan period. The major cause of price exploitation to the producers is 'dadan' that make producers bound to go for 'conditional engagement' in the fish drying business. Loans are also available throughout the year. Usually, one paddy season or fishing season (4-6 month) is the longest duration for such kinds of loan. The pattern of the loan is cash to cash and conditions for lending are the rate of interest tk. 100. Despite higher rates of interest, villagers socially accept (what is the meaning of this phrase, is it group loan?) such kinds of loans, as they do not have access to formal institutions. 'Mohajons' (mony lenders) and their money lending system is a common phenomenon in all the coastal areas and in absence of sufficient collateral and due to lapses of the government financial agencies, local 'Mohajons' become flourished in the island (Shamsuddoha, 2007). Fishers having own fishing vessels and other required fishing efforts usually take money from the local 'Aratdar' (wholesaler) depot owner as commission basis to meet running expenses. An average fishing trip rounds approximately ten to fifteen days, which involves around BD Taka 70,000 to 80,000 per trip (1 USD=77.55 BD Taka). The condition of commission system loaning is to give a share of catch, varies from 10 to 12 percent, as commission or repayment of loan taken. The price of catch fixed beforehand and remain unchanged over the whole fishing period. At the same time, influential and rich fishing vessel owners provide fishing permits and loans to fishermen and pay them for their catch, without giving them any other benefits (Shamsuddoha, 2007).

3. Results and Discussion

Poverty trap and current supply chain in Maheshkhali Island:

SEA -----COAST..... **FISHERS (100%)** 60% to Aratdar Painnya Paiker(15%) Paiker- Land (25%) Aratdar (80%) 5 5 10 DRY FISH PRODUCERS (20%) Low Income/ Middle Income/ Entrepreneurs, Feed Indebted (16%) Contact/Individual; 3.5% 0.5% (total 1%) Industry →.0.5% Arat/ Whole Sale (16%) Paiker (3%) (1.5 % to feed industry) City Whole Sale (14.5%) Retailer (3%) Retailer (14.5%) Imports Super Market Export (0.4%)(0.6%)CONSUMERS

Fig 2: Supply and Product Flow of Marine Dried fish in Domestic Market

Source: (Amin, Islam, & Hossain, 2012)

Finance related Problem

The majority of dry fish producers are from low income group and highly indebted, due to keep touch with money lenders namely, dadan, mohajan, aratdar, influent and rich fishing vessel owner and NGOs. The labors of the Maheshkhali Island work either as contract labor or contract producer who sold their product beforehand against taking of advance money in the loan period. The major cause of price exploitation to the producers is 'dadan' that make producers bound to go for 'conditional engagement' in the fish drying business and rate of interest tk. 20% for each thousand taka (Authors, how did you find this information, any survey or arbitrarily). Fishers having own fishing vessels and NGOs work in this Island that make finance in different sector specially in fishing industry and charge 10% for each thousand taka. (tk 100 for tk 1000) for how long? not clearly previously I mentioned this? Please clarify!

Supply chain related problems

In supply chain we found that, about 20 percent of total marine catch has been dried round the year with the substantial production during October to April. Interestingly we found two types of 'pikers' (wholesaler), land based wholesaler and pinnya paiker (water based wholesaler), dealing with the marketing of raw fish at the very initial stages of fish harvesting. We found three categories of producers involved in dry fish production, are;

- 1. Low income/ poor or indebted producers
- 2. Middle Income Group
- 3. Private or NGO Entrepreneur's

The majority of dry fish producers are from low income group and this supply chain is comparatively longer than the remaining two (Middle Income Group and Private on NGO Entrepreneur's). The producers of this supply chain are highly indebted and majority of them work either as contract labor or contract producer who sold their product beforehand against taking of advance money in the loan period. On the contrary, production managed by middle income group and entrepreneurs poses short supply chain and their share in dry fish production is less only 4 percent out of 20 (which 20%, please explain clearly). So low income producers have to use a long link to reach up to final consumer or market of the dry fish whereas other two supply chain, they reach to the final consumer or market by using short link.

Value addition and profitability

Theoretically there is a positive correlation between value addition and profitability (Citation needed), the more the value addition, the more the profitability. In case of traditional and long supply chain; profitability is not as high as the value added, because of profit sharing among the multi-stakes. On the other hand, operational cost of doing business is considerably high, which erodes preference and profitability. Profit erosion mainly occurred due to huge transportation cost, high transportation toll particularly in the 'Ghats' (ferry) of river routes. It is found in Masheskhali that only the 'Ghat' charge added 12 to15 percent more value while transporting as a bulk more than 50 Kgs. On the contrary, in a short supply chain, managed by private

business entrepreneurs, NGOs and super market, both the profit maximization and profit distribution are considerably high.

Proposed Social Business Model

How this model can solve related problems:

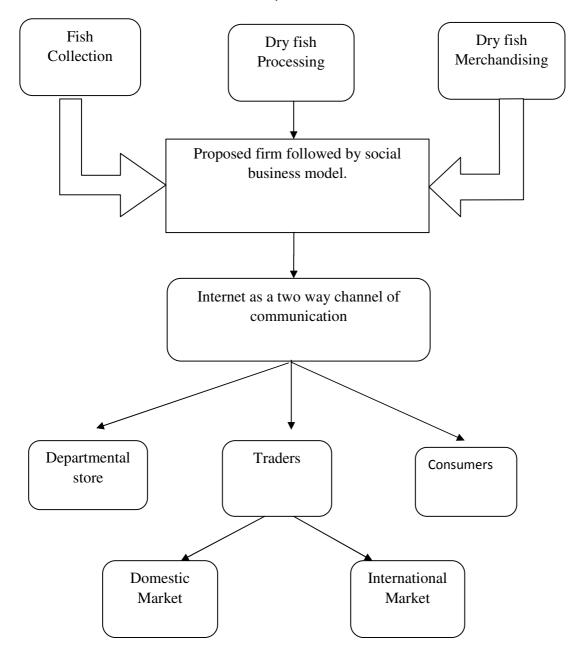


Figure: Proposed supply chain model (proposed by authors)

The proposed firm will consists of seven benevolent persons (social entrepreneurs) who work for the sake of dry fish producers focusing on eradicating poverty. They will provide financial support to dry fish producers for particular time period and get back the invested money when fishermen are well-off. The firm don't take any profit rather it will reinvested in order for continuous development and expansion of business functions. At the same time, they will provide others related technology related services and work as a channel among intermediaries through producer to final consumer that is shown in above model.

Finance / Credit system in the dry fish industry

Finance is the root of any organization. The management (social entrepreneur) of our proposed social business model will provide the finance in the dry fish industry aiming at maximizing the wealth of the dry fish producers and eliminating the range of poverty from Maheshkhali Island (how sustainable is it?). The management not only provides finance in this industry but also manage land base support where they produce the dry fish. But the management of social business model does not recoup the invested money until the dry fish producers become well establish. After recouping invested money profit part again will be reinvested for expansion and continuous development of the industry. By this way, the hunter of the poverty will be eliminated and the root level dry fish producers will be freed from inhumane exploitation and interference of the money lenders and NGOs.

Supply chain network

The proposed supply chain network is involved in collecting fish or processing and merchandising dry fish by using technology based communication with the particular channel like, departmental store, traders, and retailers. Whereas, original laborors or workers will get the actual value of dry fish merchandising. Finally, they become able to come out from the poverty line and live comfortably.

Value addition and range of profitability

In the case of the new supply chain model, the dry fish producers get expected value from the dry fish industry by dint of proper supply chain channel and removing

unnecessary intermediaries which add little value but charge higher profit margin. Since our proposed supply chain is not long and unlimited interference of the money lenders and NGOs do not exit, the range of profit is relatively higher for root level dry fish processors than existing profit margin.

4. Conclusion

Dry fish industry plays a vital role in the local economy of Maheshkhali Island. If the dry fish producers of the Maheshkhali Island become well organized, they will be able to play vital role in economic development and participate in increase range of GDP of the country. (rephrase needed) Sometimes they have to face problems when financing in this project due to rigid collateral requirement by the existing money lenders, NGOs and others financial institution, rampant malpractice in the loan sectioning process of the Maheshkhali Island. By providing a social business model and other related support to them, they will ensure their continuous support in this sector. Having ensured their participation in this field, the range of the poverty will be eradicated from the land of the Maheshkhali Island. (We need to write a little bit more in conclusion, see what I write below)

Please include: all the findings of our research in conclusion, I mean, why did we conduct this study, what has already been found by other researchers and where is the lacking/shortcomings of existing literature, in our case, existing model, new findings, how new model is different from existing one and how can it help in policy making, for example, government should encourage social business model, easy loan, especial fund for social business and so on.

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Appendix

Table: 01 Yearly expenditure and revenue from the **Dry fish production**. (crore tk)

Year	Area	Production	Expenditure	Revenue	Growth of
					revenue
2013-14	4000 biga	31500 Mt.	25.30	91.50	1.67%
2012-13	4,000 biga	35000 Mt.	22.00	90.00	4.04%
2011-12	3800 biga	35600 Mt.	18.70	86.50	
					_

Source: Maheshkhali fisheries office and Owner's organization.