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Analysis of Offshore Economic Benefit and Growth Through the Proper Uses of the Utility and Scope of Fisheries and Livestock (Animal and Veterinary): A Guideline to the MOFL in Bangladesh

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Abstract: Even though geographical location and sub-tropical weather pattern of Bangladesh are favorable to agro-businesses and but until recently it has been unable to utilize the potential by the inshore economic growth and development of agricultural sub-sectors and industries for offshore markets. Therefore, this study aimed to understand the way of offshore economic benefit by proper employing the scope of fisheries and livestock industry's in Bangladesh. The specific justification is used to figure out the factors that are responsible in the drawbacks of offshore benefits. This study helps to understand the core problems and challenges and a way forward to overcome the problems by the subject to current research effort and commercial value. Here, this study has introduced enhanced framework of strategies and guidelines to the concerned body and policy makers in Bangladesh. The indications from the study for the offshore economic benefit would be a helpful, particularly developing country like Bangladesh and elsewhere.

Key words: Fisheries and livestock, offshore economic benefit, animal and veterinary sector, impact, policy issue

INTRODUCTION

Bangladesh is a sub-tropical country having of fisheries and livestock business potentials for its favorable agro-businesses climatic conditions. It has the potential to become one of the largest agro-businesses producing countries in the world by the inshore economic growth and development of agricultural sub-sectors and industries by the proper development pathways. It may reduce the trade deficit (i.e., export and import gap) in international trade by earning lot of foreign currency from these sectors.

Bangladesh government realizes the potentials and with the limited capacities and various limitations, it has come across various strategies, policies and plans to support the agricultural sub-sectors from the independences. Until recently, several plans places have been placed by the Ministry of Fisheries and Livestock (MOFL) including the National Food Policy (NFP) to identify the fundamental responsible actors and priority actions in the agricultural sub-sectors such as fisheries, livestock, animal and veterinary sectors.

The contribution of the agro-based economy is around 8% currently and that accounts about 32% of the total income by agriculture. The current contribution of livestock and its sub-sector to overall GDP is about 2.73% which is 17.15% of agricultural GDP. It contributes to 2 million full-time and about 12 million part-time rural employments for the fisher folk (UNDP, 2007). According to the agricultural GDP, the fisheries' sector in Bangladesh accounts for about 20% while the livestock sector includes around 12% (DOF, 2008, 2009). About >10 million Bangladeshi people are directly depending on these sectors for livelihoods (Karim *et al*., 2010). The government of Bangladesh realizes the importance of agro-based potentials and the fisheries and livestock (animal and veterinary) sectors are placed the prompting and promising sectors in the development paths. The fisheries' sector alone contributes to the

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national GDP at 4% and inland fisheries sector provides the internal demand of 80% for the Bangladeshi population.

The government of Bangladesh is currently working with international cooperation and funding for the growth and inland agro-based demand. That reflects by the Plan of Action (PoA) of the National Food Policy (NFP), Country Investment Plan (CIP), Food Security Initiative (AFSI) and other supporting documents on researches, employment opportunities and socio-economic conditions of livestock and fisheries sectors by FAO, USAID and the EU. However, looking on the number of fisheries and livestock business related conditions and findings; the inland fisheries and livestock projects did not fulfill the national objectives in line with national plans. The highest growth rate of the livestock sub-sector of GDP in the years 2004-05 was 7.23% and the year 2005-06 was 6.15%. The trends' overtime indicates that the contribution of livestock and its sub-sectors to overall GDP is decreasing (BBS, 2009). The fundamental reason may be hidden but the obvious manifestation suffers by lacking on the policy action on export oriented objectives, approaches and channels focusing the needs within the sectors.

Therefore, researchers have taken the initiative to find out the lacking by focusing on the potentiality and scope of utilizing of fisheries and livestock (animal and veterinary) sectors not only by concentrating on the inland demand but also by offshore economic benefit. Particularly, we have aimed to understand the offshore economic benefit by a proper scope of fisheries and livestock industries and aimed to figure out the factors that are responsible in the drawbacks of offshore benefits. This research will help to understand the fundamental problems, lacking and challenges. Here, we have introduced enhanced a framework of strategies and guidelines that will be a way forward to overcome the problem by the subject to current research effort and commercial value to the concerned body and policy makers in Bangladesh.

MATERIAS AND METHODS

Framework of strategies: The offshore orientation (i.e., export) leads to higher growth in the developing countries that is well evident to the literature where exports play an important role in the process of economic transformation from inshore to offshore actions and adjustments. Therefore, in order to achieve an offshore economic benefit from the scope of fisheries and livestock (animal and veterinary) industries and its sub-sectors, there must be integrated national policy and sectoral development of those sectors to overcome export instability. Bangladesh must prolong to develop the scope of fisheries and livestock (animal and veterinary) industries and its sub-sectors based on the economic sustainability as a way of sustainable exercise not only for domestic demand but also for export activities. However, by looking at the national inland development aims and goals, it is well obvious that there are lots of lacking in line with national expected outcomes, supports gaps, constraints, resource utilizations and export opportunities. Therefore, the government of Bangladesh should consider centralization extents on fisheries and livestock sectors as there are two branches on the analysis of offshore shore economic benefit and growth by the scope of fisheries and livestock sectors (Fig. 1). Bangladeshi government must find out the gap between offshore scope and national capacities and how to minimize the gap by utilizing an appropriate framework.

There are sufficient literature can be found by the research contests on agribusiness-focused fisheries and

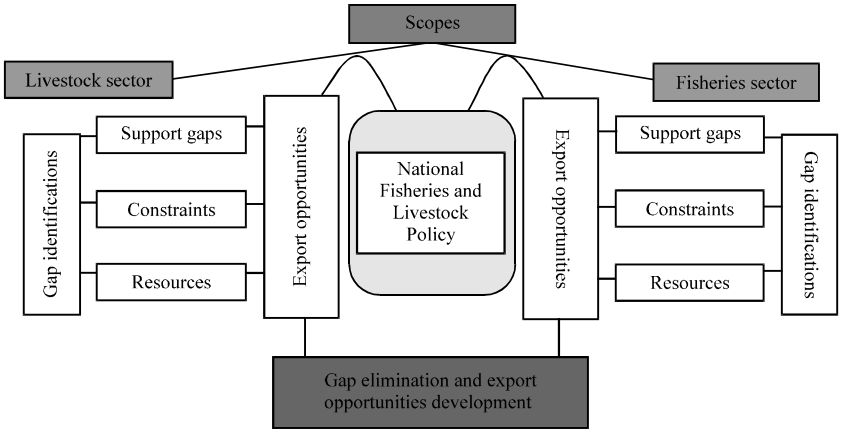

Fig. 1: Effective framework of strategies for offshore demand and activities

the livestock industries and its sub-sectors (Hashemi and Davoodi, 2012; Roy *et al*., 2011; Gheisari *et al*., 2011; Koknaroglu *et al*., 2011; Preciado *et al*., 2011; Sejian *et al*., 2011; Kioumarsi *et al*., 2011; Qiong *et al*., 2011; Tolunay *et al*., 2009; Kara *et al*., 2009; Lamidi *et al*., 2008; Rahman *et al*., 2007; DANIDA, 2002; Chilliard *et al*., 2000; Lund and Price, 1998). The findings of these researches fundamentally discuss the issue on species development, the requirements of protein contents, activities of genetic factors, genetic parameters and genetic trends, identification of fisheries and animal related diseases, disease context, disease influencing factors and remedial measures (Kor and Ziaei, 2012; Bayazit, 2011; Al-Amin *et al*., 2011; Al-Amin and Alam, 2011; Issi *et al*., 2011; Zidane *et al*., 2011; Fang *et al*., 2010; Oner *et al*., 2010; Saber *et al*., 2009; Moeini *et al*., 2009; Demircan and Binici, 2009; Gultekin *et al*., 2009; Al-Amin and Nahar, 2007; Taniguchi *et al*., 2007; Gizaw *et al*., 2007; Bozkurt, 2006; Ahuja and Montiel, 2005; Stevenson *et al*., 1994; Srikandakumar *et al*., 1986). However, the economic benefit of trade and trade related policies agribusiness-focused fisheries and the livestock industries, its sub-sectors and their impact are rather lacking. Particularly, developing country like Bangladesh the specific researches on the offshore issue are rather required.

The challenge facing by the fisheries and livestock sectors in Bangladesh is not a new issue. There are wide gaps exists that practically needs and existing supports that are available by the government and related agencies. The most important challenges are shortages institutional support to the poor farmers to convene the development of inland demand requirements and offshore transformation to meet the required demand in the international markets. The treatment of the fisheries and the livestock industries and its sub-sectors which may be similar to other conventional sectors like manufacturing do not generate equal benefit and concern. Therefore, the issue between conventional export matters and agri-based offshore market's demand need to consider deeply. Moreover, Bangladesh is lacking (i.e., absence) of fish-procurement centres for the export-oriented demand meets. In addition to that the issue on the marginal price gap between the farmers and exporting agencies and the advantages of the marginal price gap are getting by the middlemen. Bangladesh is also suffering for regulatory requirements of the importing countries such as by the European Union of seafood-safety ban in the year 1997. There is a huge gap still in the expected support and export opportunities by the government both for livestock and fisheries industries and its sub-sectors (Fig. 1). Therefore, any kind of framework of strategies must fulfill those gaps.

Gap and issues: The focus of this study is to take the initiatives to find out the appropriate guideline following the linkages between national ago-based scheme and the scope of utilizing of fisheries and livestock sectors for the offshore markets. However, there are some initiatives have been taken by the national government for the inland and offshore benefit but there are still lots of barriers in the livestock and fisheries industries and its sub-sectors that are largely revolving by financial constraints and credit limitations. Moreover, there are some barriers in the efficient operation and in the way forward for policy option. In order to get effective outcomes of offshore economic markets, a sound foreign policy requires finding out the gap identification and exporting opportunities for both fisheries and livestock sectors which we have shown in Fig. 1. In addition to that there are some fundamental drawbacks needs to eliminate which indicates as follows:

- Financial support by the government
- Project for boosting fish and cattle production
- Utilization of rice field to boost fish production (off season)
- Credit flow to fish farming incage
- Effective policy boosts for frozen fishexporters

The constraints and support gaps for both fisheries and livestock sectors must be reduced by the operational plans and national policy frameworks. The initiative should concentrate in order to address the need based, collection of unexpected experience and co-ordination of previous services and programmes. The experiences from the global review of knowledge and experiences can be utilized in Bangladesh. The government of Bangladesh should embark on a cash incentive system that boosts the production of frozen fish exports and encourages extending the moratorium on term loan repayment. The new invoice-based cash incentive should encourage local exporters to seek maximum value of their products. The government must co-ordinate with finance division under Ministry of Finance, Banking and Financial Institutions, Export Promotion Bureau and Bangladesh Frozen Food Exporters Association (BFFEA).

According to the Enhancing the Impacts of Decentralized (Fish) Seed Production (RIU-DSP) research

findings, there are about 2 lakh tons additional fish production is possible by enhancing pisciculture in rice fields (i.e., Rangpur division alone) annually. However, there should be provisioned of the latest scientific technologies, management option and proper guidance to farmers of producing quality fingerlings of high-yielding fish (i.e., GIFT Tilapia) in the farmlands, specifically in the rice off season. Currently, the UK-based DFID and World Fish Centre of Bangladesh are looking on the provision of the latest scientific technologies to produce additional fish production enhancing pisciculture in the rice fields. Therefore, the government should properly co-ordinate World Fish Centre of Bangladesh, fish farmers associations and Export Promotion Bureau and Bangladesh Frozen Food Exporters Association (BFFEA) to get the full benefit of pisciculture in rice fields from all over the Bangladesh. However, there should be an adequate institutional and financial support to carry out the pisciculture alternatives.

Moreover, there should be a good co-ordination with Agricultural and Rural Credit Policy (ARCP) of the Bangladesh Bank (BB) and Agricultural Credit Department (ACD) to disbarment of agricultural loans. The fish farming in the cage is entitled to get bank loans as per policy of the Bangladesh Bank but the poor farmers are not well aware and most of the time not getting the benefit of bank loan. The government should take the necessary actions on that issues and how to get involve the poor farmers to bring under the umbrella of Agricultural and Rural Credit Policy (ARCP). Here, the bank and financial institution should take the necessary steps for financing of fisheries and livestock sub-sectors and other related industries. There should be a good collaboration with the bank and financial institution to evaluate the potentials of fish cultivation in the region basis and banks and financial institutions should develop of credit norms specifying the amount of loan, repayment schedule and tenure disbursement within the loan period.

The financial institution, banks and financial institution should evaluate the potentials of fish cultivation and develop credit norms specifying the amount of loan, tenure disbursement period and repayment schedule based on the local needs. There is demand to the government to develop new effective policy boosts for frozen fishexporters. The aim of rural and agricultural credit policy should particularly focus to enhance fish production in the country to meet the growing demand in the international markets. The policy option of cultivation of black tiger shrimps and farming of hybrid Vannamei variety of shrimps may be considered locally following on the international experiences like from Vietnam, Thailand. The hybrid shrimps are much profitable and the exporting countries are admiring much with global market. It will also help export oriented fishermen to involve in alternative option to generate activities for during the lean period and odd season for inland shrimps.

Policy on economic sustainability: There is huge potential in the fisheries and livestock sectors in Bangladesh for geographical location but the risk is also there for sustainability due to effective policy and guidelines in the inland markets. There should be effective of integration between national priorities and sub-sectoral policies. Bangladesh requires a healthy guideline for the effective market place before any expansion of fisheries and livestock sectors.

The investment opportunity and institutional arrangements should be coordinated to get the tangible benefit and outcome. The inland demand and international export opportunity should be co-orientated for fisheries and livestock sectors and all active priorities should be integrated with national policy (Fig. 2). The government must make sure economic sustainability of the fisheries and livestock industry in the micro and macro level and policy framework should address national sustainability objective.

Planning Commission of Bangladesh (PCB) recently estimated the projected demand and gap of fisheries and livestock sectors and industries for the years 2011-2015. The projected demand utilizes the inland demand, export opportunities, potentiality and deficit trend of the difference between the demand and supply gap (Planning Commission, 2009). The research findings of Karim *et al.* (2010) also indicate similar estimation on the deficit and resource gaps by an end of the period of sixth 5 years plan (2011-2015). Therefore, the evidence place

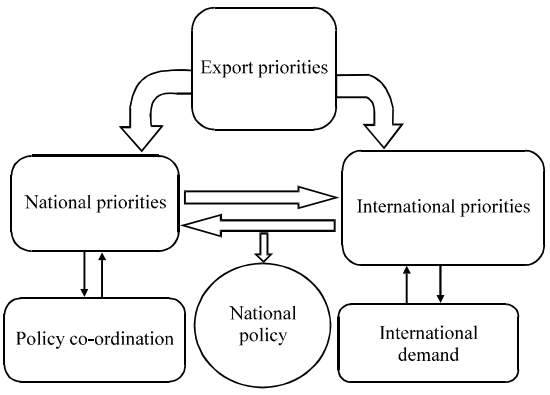

Fig. 2: National policy on economic sustainability

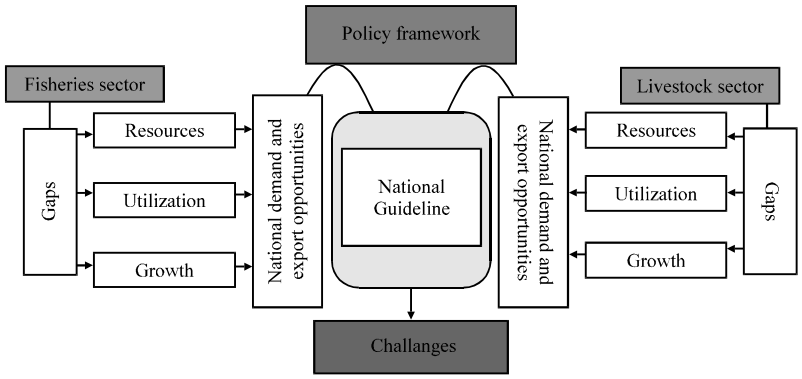

Fig. 3: Gaps and links of inshore and offshore challenges of fisheries and livestock sectors

questions on the resource stock, resource utilization, management on the fisheries and livestock and its related sub-sectors and industries (Fig. 3). The subject matter of a policy framework is currently under pressure for sure to meet the inland demand and support to meet international demand for offshore markets. The issues and gaps therefore, must overcome within the policy framework both fisheries and livestock sub-sectors and industries.

RESULTS AND DISCUSSION

Challenges: Bangladesh is considering inshore growth and offshore demand such as exporting markets in the agricultural sub-sectors and attention reflect on various strategies, policies, frameworks and national plans. It is getting some benefits by some donor agencies in the forms of financial supports and activities on the possible actions plans and frameworks. However, most of the time implementation procedures are suffering by bureaucracy and by the involvement of politicians. As a result, the basic needs are ultimately overlooking and that causes negative impact to the farmers and who are involved within the sectors. Moreover, National Fisheries and Livestock Policy (NFLP) and state policy (i.e., regional) are conflicting with each other in the way of implementation. In addition to that stated policy involves other ministries and agencies which most of the time unable to merge with relevant ministries to get effective action and outcome. Therefore, to get the advantage by offshore market the above-mentioned challenges in fisheries and livestock (animal and veterinary) industry must be overcome.

There are other kinds of barriers that are also the drawback of effectiveness of national action and policy; these are lacking financial support by the government, lacking of the project for boosting fish and cattle production, lacking of utilization of rice field to boost fish production in off season, lacking of credit flow to fish farming in cage and lacking of new policy boosts for frozen fish exporters. There is a value chain within the inshore and offshore growth and development of fisheries and livestock sectors but it is lacking for adequate marketing system in Bangladesh. Moreover, the marginal farmers are not getting their fair prices for their product and services from the market due to unfair trade syndicates. Sometime, the poor infrastructure, poor communication systems and lack of storage systems are causing extra negative impact on the expected outcome. In addition to that inadequate financial credit facilities are causing a problem in the value chain of a marketing system for fisheries and livestock and its sub-industries. These sectors are also receiving inadequate subsidy compared to another economic sector. As the poor farmer cannot get easy access of government and non-government credit institutions therefore, they cannot contribute for the exports and offshore markets.

A way forward: We have observed that livestock and fisheries sectors are suffering a lot even though it would have lots of potential for the offshore markets. The effective policy lacking together with bureaucratic barriers are causing one step further of the drawback to get the expected outcome. Therefore, the policy makers and concerned body must eliminate the raised challenges in order to have the fruitful outcome such as by:

- Appropriate agenda setting
- Policy orientation
- Implementation and evaluation

Therefore, in addressing the challenges by the livestock and fisheries' sectors policy and concerned body must consider firstly agenda setting on removal of lacking of financial support, lacking of a project for boosting fish and cattle production, lacking of utilization of rice field to boost fish production in off season, lacking of credit flow to fish farming in cage and lacking of new policy boosts for frozen fish exporters. Secondly,

following on the problem and challenges, the cabinet (i.e., evaluation committee) of the respected ministries finalizes the policy formulation (i.e., based on the fundamental needs) and there should be an evaluation committee which would be responsible of looking at the evaluation of adopted and implemented plans and actions. And finally, based on the recommendation by the members of the evaluation committee, the final policy should be adopted and implemented. However, there should be a good coordination of what researchers have shown in the Fig. 2 and 3.

CONCLUSION

This study aimed to understand the policy gaps that are barriers to acquire the utility and scope of fisheries and livestock (animal and veterinary) industries for the offshore economic benefits from international markets. In order to have a sound policy guideline, detailed justification is exploited to figure out the factors that are responsible in the drawbacks of offshore markets and benefits in Bangladesh. This study helps to understand the necessary provision and expansion in the fisheries and livestock sectors subject to current research effort and commercial value and that are obvious for a sound framework to the concerned body and policy makers in Bangladesh.

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