Promotion of Agro-Processing Industry in Bangladesh: Potentials Constraints and Policy Issues

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I. Introduction

Agro-processing is identified as a thrust sector in Bangladesh. Since Bangladesh can grow diversified crops and with surpluses of horticulture crops, it is imperative that value addition is necessary. Farmers do not get good price when their crops grow in plenty because most of the agricultural produces are perishable. Processing of product can help preservation, ensure quality 'value addition' and creates immense of form and time utilities for consumption.

There are many advantages to the economy if agro-processing is encouraged. Some of the pertinent advantages are mentioned below:

Higher prices of crops: If the surplus agricultural produces can be processed by processing entrepreneurs, the demand for the agricultural produces will remain higher due to the effects of increased derived demand for product inputs and helping the farmers get high prices even in times of surplus production.

Increased work opportunity for women: Currently there is limited opportunity for women to work at home. So, if they can process some fruits and vegetables at home they can keep these products for their own consumption and if they have a surplus to sell they can earn some income. This could be a very good method to help women to generate additional income from their own home. The home processed products could be pickles, chutneys, squashes, dried vegetables, mangoleathers, banana chips etc. At present, less than 0.5 per cent of total Bangladesh horticultural production is processed.

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Value added to agricultural crops: A rough estimate shows that by spending Tk. 10 for 10 raw bananas and by processing them into banana chip, villagers should be able to sell those for Tk. 20 - 25. The same can apply to other crops. If one can export the product, they might get Tk. 35 or more. This is the biggest advantage of processing activity. Value addition activity can increase employment and diversified use of produces.

Quality storage: The major difficulty of production of agricultural crops is marketing due to perishability of such produces. Processed products can be kept in good quality for longer time. Growers will have more barganining power in offseason sales and seasonal high fluctuation of prices will also be reduced if 'form utility' of products is created by processing activity.'

Earning more foreign exchange: If food processors can ensure quality to meet international standard, the new entrepreneurs can export the processed products to earn foreign exchange. Thus, this can help diversify source of earning foreign exchanges for the country. For sustained economic growth and prosperity, export earnings must be greater than the import spending. PRAN has opened a new vista in this regard by exporting agro-processed products in Middle East and African countries.

Increased employment: All value addition activities (processing, storage) create employment opportunities. Increased agro-processing activities may create forward linkage (selling, distribution retailing etc.) and backward linkage services (remolding, transportation, sorting/grading etc.). All these activities require simple / affordable techniques and technologies.

2. Constraints of Agro-Industrialisation

No explicit national policy on agro-industry development in Bangladesh: there is any concrete national policy on agro-industry development for Bangladesh. This limits the expansion of agro-industry; the entrepreneurs find no policy guidelines for investment in the sector.

No proper government organization to work at the national level: There are some organizations, which need to work on the development of agro-industry. Post-harvest Technology Division of Bangladesh Agricultural Research Institute (BARI) has done some work on the training of women. There is Food Technology and Rural Industry Department at Bangladesh Agricultural University (BAU), Mymensingh. Appropriate Technology Development Programme (ATDP) Phase II is also endeavoring to facilitate development of agro-processing and entrepreneurship in the country. But there is no central agency to prompt agro-processing in coherent manner.

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No national committee on agro-industry development: Many ministries are involved with agro-industry development e.g. Ministry of Agriculture (involved with the supply of raw materials), Ministry of Industry (involved with how to set up small scale food industry), Ministry of Public Health (involved in implementing Food and Drug Act (FDA), Ministry of Finance has to provide fund and Ministry of Commerce has to help in developing marketing system etc. The BSTI has to announce appropriate 'food-code' of the processed foods relieving public fear on health and hygiene. To get these ministries to work together, there is need of a very strong and efficient National Committee.

Inadequate supply of raw materials for processing: Although Bangladesh can produce a lot of agricultural crops, most of those crops are for fresh consumption and not aimed for processing. A classic example of this is tomato. This country grows lot of tomato for only table consumption, but there is not enough supply for processing to make tomato paste. For paste making, one needs the variety, which can give high solid content and red colour. Another good example is baby corn, one need to have proper variety of baby corn for canning. One cannot use animal feed corn as a substitute for baby corn. Alfanso mango or a nearest alternative needs to be produced in large-scale for extracting pulp for juice drinks.

Lack of well-trained human resource in food processing: There is a serious dearth of trained human resource in food processing activities. There are only one or two food science or food technology departments in the Universities in this country. One is with Dhaka University, Food Science and Nutrition Department and the other is not exactly Food Science or Food Technology, but Food Engineering at the Bangladesh Agricultural University, Mymensingh. In contrast, Thailand has 36 Food Science or Food Technology Department and another 4 Faculty of Agro-Industry, consisting of Food Science or Food Technology Department, Food Engineering Dept., Biotechnology Dept., Agro-product Development Dept. and Packaging Technology Department. For market promotion of such products even there is no Department of Agricultural Marketing and Agribusiness in any of the Technical & Science University. Opening of Agri-business MBA in one of the private universities recently is a very right step forward for development of human resource towards management of agro-enterprises. In many instances, public universities are loathed, rigid and reluctant to re-shape, redesign courses embracing the changing need of the economy.

Inadequate research and development: There are four or five organizations that carry out research and development on agro-industry but with limitation of budget and skilled-human resource. Not much research work has so far been done in this country, particularly on processing and packaging development. We need a

lot more of empirical research and development in this field, including development of marketing systems for the up-coming processed products.

Not enough intermediate technology development: Since not enough was done on research and development, Bangladesh is lacking proper intermediate technologies to give momentum for the processing activities. Processing revolution requires appropriate production and handling technologies for many agricultural produces in Bangladesh.

Food processing equipment are in short supply: Most of the food processing equipment are not produced locally and are mainly imported. These equipment need to be designed and produced locally (also this will help creation of job opportunities). Local production of equipment will ensure easy availability at an affordable price. There is dearth of lug-capped bottles, jars and canning facilities in the country.

Not many investors in food processing industry: There will be more industrial investment in food industry if the Government is serious in promoting agroprocessing industrialization in the country. However, currently, there are not many interested entrepreneurs in agro-processing industries. Tax incentives and medium to long term loan facilities have to be provided to prospective agro-processing industrialist.

No special programme for institutional loan for food processing: For new entrepreneurs including food technology and agricultural marketing/agribusiness graduates, special soft-loan programme with low interest should be provided so that they can start their processing business and marketing in the well connected raw materials producing areas.

3. Policy Issues for Agro-Industrialisation

For rapid agro-industrialization in Bangladesh, the constraints mentioned above have to be overcomed. Some recommendations are put forward here for attaining momentum in agro-industrialization in the country.

Frame national policy on agro-industry development: It is a must for the government to prepare and announce a well thought out agro-industrial national policy. The government should bring every organization involved with agroi-industry to work together and lend support to all activities on agro-industry development. Specialist support/advice from countries in the region, like Thailand and Malaysia, can be availed for this.

Set up an organization to work for agro-industry: An Agro-industry Development Division may be established within the Ministry of Agriculture or Ministry of Industry. This Division will serve as a coordinating body on behalf of the National Committee. All the planning budgeting, monitoring should be implemented by this Division.

Set up a national committee on agro-industry development: Members of this committee would come from different Ministries. Agro-industry Division will accommodate this committee and should be responsible for organizing the meeting and act as a Secretariat. This committee will be responsible for planning, allocating budget, monitoring, evaluation and formulating policies on Agro-Industry Development of the country.

Solve problem of raw materials: This task totally belongs to the Ministry of Agriculture. But the idea of producing for marketing fresh product has to change also to produce enough for industrial market. Experiments have to be carried out with research organization on which crop or which variety will be fit for processing. Contract farming system may also be introduced to link up farmers and agro-enterprises.

Create well-trained human resource for agro-industry development: The proposed National Committee on agro-industry development has to study how many well-trained human resource is needed for Bangladesh and then ask the government to support universities, which have potential to produce graduates on food science, food technology and agribusiness according to the need of the country. Many universities in Bangladesh have science subjects, which can be the basic sciences for these students. Some facilitation to these students in agro-industry and related subjects will help accelerate creation of good human resource locally for agro-industry development.

Increase fund for research and development: Some research institutes in Bangladesh have been equipped with very sophisticated equipment (eg., BCSIR) but they are short of personnel and fund to carry out research and development studies. If Government provides them with enough skilled human resource and allocate fund for the research institutes, this problem can be solved.

Develop proper intermediate technology: If research institutes and universities carry out research and development projects on agro-industry/agro-businesses in the country, the results can be applied by private sectors and small entrepreneurs. They can build up high quality products to meet demand of local and international markets.

Increase local production of food-processing equipment: This problem is a difficult one, because to produce food-processing equipment locally one needs to

have a number of personnel on food engineering. These people can design equipment and can advise private sector to build equipment for food processing. The Food Technology and Rural Industry Department of Agricultural University at Mymensingh has initiated food engineering courses (four year graduation study) recently. Hopefully these students can be a great help to the country if they are well trained. But we need a lot more of this kind of courses, including studies in agricultural marketing and agribusiness. Other universities should also initiate courses towards this end.

Encourage more investment in agro-industry: Private sector is interested to invest money if there is adequate incentive. The government must extend assistance in terms of soft loan, relax tax and duties on import of food processing equipment, assist in marketing convenient to exporting etc. In such a policy environment new entrepreneurs will surely invest more money in the processing industries. Small entrepreneurs may flood in agro-processing business if appropriate physical and social environment is ensured. Improving market information and marketing systems as well as identifying the mechanisms for acquiring technology is required for agribusiness development. The main problem of industrial investment in this country is deteriorating law and order situation which must be improved at any cost.

Channel soft-loan for agro-industry: Government coult set up a special softloan programme to support all activities involved with agro-industry development. International donors are interested to support this kind of activities because it can also help the vulnerable women group in a developing economy like Bangladesh.