

Proceedings of the Workshop (Final)

Subject: Training Workshop on Safe and Minimally Processed Agro-Products Supply Chain Management

Date: 27th February, 2012

Time: 09.00am – 16.30pm

Venue: Hortex Conference Room

Participants: Total of 31

Rapporteur: Mr. Mitul K. Saha, AGM (Marketing), Hortex Foundation



A view of training workshop

Five papers presented in the workshop:

- Present practices of minimally processed agro-products marketing in the superstore supply chain, presented by Md. Mozibul Hoque, Manager-Procurement, Rahimafrooz as keynote paper.
- Minimal processing techniques of fresh agricultural produces, presented by Dr. Sreekanta Sheel, Logistics (Transportation and Storage) Expert, SCDC, NATP, Hortex Foundation.
- Quality and safety of minimally processed fruits and vegetables, presented by Dr. Md. Saleh Ahmed, Post Harvest Handling and Quality Assurance Expert, SCDC, NATP, Hortex Foundation.
- Marketing concepts & procurement scope of agricultural produces at SCDC project sites, presented by Md. Bazlur Rahman, Marketing Expert, SCDC, NATP, Hortex Foundation.
- Entrepreneurship development on minimally processed agricultural products in the superstore supply chain, presented by Md. Mahbub Alam, Business Development Expert, SCDC, NATP, Hortex Foundation.

Supply Chain Development Component (SCDC), National Agricultural Technology Project (NATP), Hortex Foundation organized a training workshop on ***“Safe and Minimally Processed Agro-Products Supply Chain Management”*** on 27th February 2012 at its Conference Room. The program mainly included total of five presentations on different issues of safe and minimally processed agricultural produces. The experts interacted and shared findings of their papers with the participants of the workshop to get their suggestions and recommendations.

Dr. Md. Abdur Razzaque, Project Director, NATP (Phase-1), PCU, BARC Complex was the Chief Guest in the workshop. Dr. S.M Monowar Hossain, Managing Director, Hortex Foundation and Director, PIU, SCDC, NATP chaired the workshop. Dr. Md. Abdur Rashid, Training & Communication Expert, SCDC, NATP, Hortex Foundation delivered the welcome speech and Md. Mozibul Hoque, Manager-Procurement, Rahimafrooz presented the keynote paper. Dr. Sreekanta Sheel, Logistics (Transportation

and Storage) Expert, Dr. Md. Saleh Ahmed, Post Harvest Handling and Quality Assurance Expert, Md. Bazlur Rahman, Marketing Expert and Md. Mahbub Alam, Business Development Expert, SCDC, NATP, Hortex Foundation presented their technical paper individually in the training workshop. A total of 31 participants (*list attached in Annex 1*) attended the workshop among which 7 participants took part in the open discussion.

Md. Mozibul Hoque, the keynote speaker shared experiences on minimally processed agricultural products marketing in the superstore. His paper covered general purchasing scenario of Ready to Eat meals by consumers at home and abroad, concept of ready to eat meal, markets of minimally processed vegetables like lettuce, carrots, tomatoes, potatoes, broccoli, cauliflower, spinach, celery sticks, leek, mixed salads, vegetables snacks etc, fruits like oranges, apples, pears, kiwi, pineapple, melon, watermelon, jackfruits and other fruit slices etc, fish and meat at Agora. He further mentioned that sales trend at Agora increased from Tk. 33 million in 2008 to Tk. 65 million in 2011, i.e. 97% growth compared to 2008. He informed the participants that minimally processed agro products' projected demand at Agora would be Tk. 250 million and Tk. 600 million for the year 2012 and 2015 respectively due to changes in food habits and busy schedules of both husband and wife in middle and upper class population. He mentioned that strict compliances (product reception to sale) of minimally processed agro products were followed for quality control. He also explained issues of quality control mechanism for safe food products, maintenance of clean environment and criteria of good manufacturing practices. He further mentioned the challenges and opportunities/advantages of minimally processed products for the superstores in Bangladesh.

Dr. Md. Abdur Razzaque, the Chief Guest pointed out in his deliberation that emphasis should be put on energy saving by promotion and diversification of Ready to Eat and Ready to Cook mixed products. He explained that product mix/commodity combination exists in minimally processed item, and hence it maintains dietary diversity, creates nutritional balance and reduces wastage of food. He emphasized that fixation of price, target for extension of shelf life and the concerned technologies are important aspects which will be considered during processing. He added that improvement of capacity on quality of input, R&D, sanitary and phytosanitary issue, cool chain transportation, shelf life, legal environment, waste disposal and monitoring is essential in each stage. He further added that, increase in the usage of minimally processed food removes the market glut situation in different produces. He mentioned that there is a great scope prevails to work jointly with Common Interest Group (CIG) farmers of SCDC and the superstores.

Dr. S. M Monowar Hossain, Managing Director, Hortex Foundation and the Chairman of workshop mentioned in his deliberation that there are a lot of problems in the supply chain for introducing minimally processed agricultural produces in Bangladesh. He added that those problems and barriers would be addressed in order to abide by the market demands and cope with the competitors in the market. He observed that problems are so many; all the problems could not be solved at a time. He expressed that quality of minimally processed produces could be ensured through concerned efforts of supply chain actors adopting appropriate technology. He added that price, quality and services are important to introduce the minimally processed agricultural produces in the market. He further mentioned that the empowerment of the farming community is very important to diversify minimally

processed item. There is a great scope for export apart from fulfilling the domestic market demand. He told that, microbial contamination is a major problem for minimally processed commodities. He mentioned that R&D on post harvest management, training, awareness, guiding, public private partnership, farm to market approach etc are needed to sensitize this issue. He urged upon all the line agencies involved in the supply chain to sit together to fix up the mechanism for marketing of minimal processed fruits and vegetables.

Highlighted areas of other four papers:

- The paper entitled “Minimal processing techniques of fresh agricultural produces” was presented by Dr. Sreekanta Sheel, Logistics (Transportation and Storage) Expert, SCDC, NATP, Hortex Foundation. The highlighted areas of the paper were:
 - Shelf life of minimally processed product
 - Definition of minimal processing
 - Market potential
 - Nature of minimally processed fruits
 - Operations of minimal processing (harvesting, receiving at the processing facility, pre-cooling, washing and disinfection, peeling, trimming, deseeding, cutting operations, use suitable tools for cutting, sorting for defects, rinsing of pre-cut fruits and vegetables, dipping, prevention of oxidative browning, treating with ascorbic acid to prevent oxidative browning, treatment with coating, drying, packaging/labeling etc)
 - Suitable packaging system
 - Major requirement for proper packaging
 - Types of packages
 - Modified Atmospheric Packaging (MAP) and its scope
 - Causes of quality deterioration due to temperature effects
 - Signs of deterioration in fresh cut produce
 - Minimal processing system of pineapple and jackfruits
 - Export potential and conclusion

- Dr. Md. Saleh Ahmed, Post Harvest Handling and Quality Assurance Expert, SCDC, NATP, Hortex Foundation presented the paper on “Quality and safety of minimally processed fruits and vegetables”. This technical paper contained in details the critical issues that must be addressed to satisfy the consumer and market demand for convenience, quality and safety. The highlighted areas of the paper were:
 - Basic information on minimally processing fruits and vegetables
 - Differentiation of minimally processing than conventional processing
 - Food quality vs. food safety
 - Factors affecting food quality
 - General processing system of minimally processed product
 - Characteristics of basic quality requirements on fruits and vegetables
 - Factors influencing composition and quality of commodities
 - Influence of preparation procedure
 - Maintaining quality
 - Post preparation factors

- Signs of quality deterioration
 - Characteristics of minimally processed products
 - Shelf life limitations to minimally processed produce
 - Jackfruits/pineapple suitable for minimally processed
 - Minimal processing operation (produce maturity, use suitable tools for cutting, coating treatment, prevention mechanisms of oxidative browning, suitable packing etc)
 - Causes of quality deterioration due to temperature effects
 - Quality deterioration signs of fresh cut produce
 - Worker health and hygiene
 - Market planning, export potential and opportunities in marketing etc.
- The paper on “Marketing concepts & procurement scope of agricultural produces at SCDC project sites” presented by Md. Bazlur Rahman, Marketing Expert, SCDC, NATP, Hortex Foundation. The major findings of the paper were:
- Basic marketing concept emphasizes that it’s a series of inter-connected activities in agriculture including production planning to sending information from production area to market. All of these activities are linked in the production-marketing chain. Marketing systems are dynamic, competitive and involve continuous change and improvement.
 - Sharing targeted agro commodities (24 nos.) in 10 Upazilas of SCDC project areas with variety name.
 - Brief discussion on operational activities of Commodity Collection and Marketing Center (CCMC).
 - Sharing list of management committee of CCMC and location, contact person of each CCMC.
- Md. Mahbub Alam, Business Development Expert, SCDC, NATP, Hortex Foundation presented the paper on “Entrepreneurship development on minimally processed agricultural products in the superstore supply chain”. The major findings of the presentation were:
- Developed 29 new entrepreneurs in 10 Upazilas of SCDC project areas
 - Training and technical support provided to 547 entrepreneurs and linked with different service providers
 - Identification of business opportunities in different areas
 - Importance of training and workshop for entrepreneurship development
 - Characteristics of minimally processed foods that are lightly/partially/fresh processed and fresh-cut & preprocessed items which are more perishable than intact product
 - Importance of minimally processed foods which includes value addition in the product
 - Examples of business opportunities in minimally processed food items (e.g. fruits & vegetables, milk, meat and fish etc) and
 - Recommendations for business promotion.

The following recommendations were made from open discussion in the workshop:

- Strengthen research and development (R&D) to develop suitable technology of minimal processing
- Identify the potential products through market study for minimal processing
- Develop suitable physical facilities/infrastructures (pack house, cool chain transport, storage, testing laboratory services etc) through public private partnership
- Strengthen processed product promotion activities through exhibition, fair, mass media announcement/campaign etc
- Strengthen capacity building and information dissemination activities through making awareness and organizing training/seminar/workshop etc
- Intensify extension services and education on minimal processing
- Consolidate information on cool chain management of minimally processed product and sea shipment technologies
- Develop appropriate packaging system for minimally processed products and introduce at the stakeholders level
- Develop branding of minimally processed product
- Establish minimally processed plants through providing financial and technical supports to the new entrepreneurs.
- Establish national standard following the market requirements and national certification body
- Strengthen Human Resource Development (HRD) including arrangement of overseas training program for the stakeholders.

The workshop came to end with the vote of thanks delivered by Dr. Md. Abdur Rashid, Training & Communication Expert, SCDC, NATP, Hortex Foundation.

Mitul K. Saha
AGM (Supply and Value Chain, Marketing, R&D)
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Dr. S. M. Monowar Hossain
Managing Director, Hortex Foundation
and
Director, PIU, SCDC, NATP

Annex 1: Participants List of Workshop on “Safe and Minimal Processed Agricultural Products Supply Chain”

National Agricultural Technology Project (NATP), Supply Chain Development Component (SCDC)
Hortex Foundation

Monday 27 February 2012

Venue: Hortex Conference Room

SL	Name, Designation & Address	Contact Number	Signature
01	Md. Ershadul Alam, SCDO, Jhikorgacha, Jessore	01714604619	
02	Md. Monirul Islam, SCDO, Savar	01713739101	
03	Md. Shahajalal, SCDO, Srimongal, Moulvibazar	01813054901	
04	Mr. Mitul Kumar Saha, AGM (Marketing), Hortex Foundation	01711370491	
05	Md. Mahbub Alam, Business Development Expert, SCDC, NATP, Hortex Foundation	01973141181	
06	Mr. Harun-or-Rashid, Mirpur-1, Dhaka	01911643621	
07	Md. Sahajahan, SCDO, Mirsharai, Chittagong	01818811919	
08	Md. Babul Hossain, Shibganj, Bogra	01716276250	
09	Md. Nurul Islam Bhuiyan, M & E Expert, SCDC, NATP, Hortex Foundation	01552347550	
10	Md. Bazlur Rahman, Marketing Expert, SCDC, NATP, Hortex Foundation	01716373115	
11	Mr. Mesbahuddin Mahmood, DGM, Hortex Foundation	01817018752	
12	Dr. Md. Abdur Rashid, T&C Expert, SCDC, NATP, Hortex Foundation	01711884593	
13	Dr. Md. Anisur Rahman, Supply Chain Knowledge Management Expert, SCDC, NATP, Hortex Foundation	01720010936	
14	Md. Abdur Rashid, Manager (Financial Management), SCDC, NATP, Hortex Foundation	01741128823	
15	Mr. Shamsuddin Ahmed, PS to MD, Hortex Foundation	01556360226	
16	Md. Faruk Hossain, Green Agro-base Company Ltd.	01911543951	
17	Dr. S.M Monowar Hossain, Managing Director, Hortex Foundation and Director, PIU, SCDC, NATP	01711565731	
18	Dr. Md. Abdur Razzaque, Project Director, NATP (Phase-1), PCU, BARC Complex	01714179831	
19	Md. Muzibul Hoque, Manager (Procurement), Rahimafrooz, Dhaka	01715394335	
20	Ms. Hasina Momtaz, Assistant Manager, (Procurement), SCDC, NATP, Hortex Foundation	01552359186	
21	Md. Mahadi Faisal, Manager, Category Management, ACI Logistics Ltd.	01970024277	
22	Md. Abu Hossain Al Masud, SCDO, Kapasia	01717155767	
23	Dr. Sreekanta Sheel, Logistics (Transport & Storage) Expert, SCDC, NATP, Hortex Foundation	01714083764	
24	Md. Faruk Hossen, SCDO, Belabo, Narshingdhi	01723256814	
25	Md. Abdul Kayum, Assistant Manager (Accounts), SCDC, NATP, Hortex Foundation	01712210048	
26	Md. Rafiqul Islam, AGM (Production), Hortex Foundation	01199104389	
27	Md. Osman Gani, SCDO, Parbotipur, Dinajpur	01714943594	
28	Mr. Jibon Kumar Mondol, SCDO, Delduar, Tangail	01714658201	
29	Md. Monjurul Islam, SCDO, Comilla Sadar, Comilla	01716610370	
30	Dr. Md. Saleh Ahmed, Post harvest & Quality Assurance Expert, SCDC, NATP, Hortex Foundation	01712740107	
31	Mian Mushtaque Ahmed, Manager (Admin), SCDC, NATP, Hortex Foundation	01552405858	