

**NATIONAL CASE STUDY ON ENVIRONMENTAL
REQUIREMENT, MARKET ACCESS/ ENTRY AND
EXPORT COMPETITIVENESS IN HORTICULTURE
IN BANGLADESH**

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INTRODUCTION

- Environmental Requirements with Potential Effects on Market Access Include:
 - Mandatory standards
 - Voluntary standards
 - Labeling requirements, either mandatory or voluntary
 - Packaging requirements
 - SPS measures
- Thus what is Quality Standards at the end of the Consumers are generally viewed as Environmental Standards at the end of the producers
- Developing Country Producers and Exporters need to be able to meet such Requirements and Standards to sustain in international competitiveness race

OVERVIEW OF BANGLADESH AGRICULTURE

- Bangladesh witnesses a gradual increase in the share of the industrial and service sectors to GDP over the years
- Yet agriculture remains a fundamental sector with:
 - Contribution of 22% to GDP
 - Absorption of more than 60% of national workforce
 - Increased productivity
 - Incipient diversification into value-added products
 - Almost self-sufficiency in rice production
 - Policy framework supporting agri. Development
 - Gradual transformation from subsistence to commercial farming

PRESENT PRODUCTION STATUS

Cropped Area & Production Purpose

- Total Cropped Area: 14.17 m. ha
- Cropped area under horticulture: 6.73%
- Cropped Area under vegetables and fruits: 3.22%
- Main purposes of vegetables and fruits cultivation:
 - Subsistence production
 - Commercial production
 - Seed production

Productivity & Use

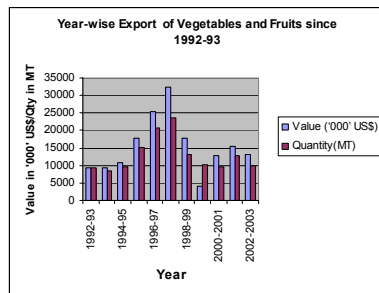
- Average Yield/Area:
 - 2.6 MT for vegetables and 3.27 MT for fruits/acre
- Productivity remained stagnant in vegetables and declined in fruits over last 10 years(3.40 MT in 93-94)
- Cropped Area, however, increased from 1.34% to 1.79% in vegetable and from 1.29% to 1.43% in fruits between 1993-94 and 2002-2003
- National consumption level of both vegetables and fruits is much below the standard requirement
- Export is also insignificant, barely 0.3%, of roughly 3 m. tons of annual production

FLOWERS

- Still under-developed
- Total area under cultivation appears to be above 3,000 acres all over the country
- Flowers are mainly grown in home gardens except tuberose and a portion of rose, marigold, gladiolus, gerbera and orchid which are grown commercially
- Commercial production mainly concentrates in Jhikergacha and Chuadanga for tuberose, in Savar for rose, marigold and orchid and in Bhaluka and Phulbaria for gladiolus, gerbera and orchid

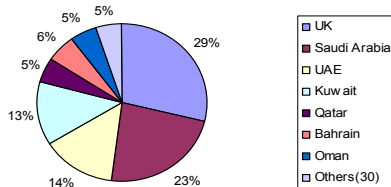
EXISTING EXPORT PATTERN: VEGETABLES & FRUITS

Export trend over last 10 years: Tremendous growth over first 5 years followed by sharp decline over last 5 years



Market direction: UK & ME, same pattern over last 10 years

Major Market Destinations of Vegetables and fruits in the Year 2002-2003



- 10 Major Items of Vegetables/ Fruits Exported to the United Kingdom in 1996-97

Ranking	Name of Crop	Volume Kg	Value %	Value GBP	Avg. Price GBP/Kg
1.	Green Chilly	67,150	16.5%	91,473	1.36
2.	Jack Fruit	54,340	13.4%	66,808	1.23
3.	Lemon	36,020	8.9%	64,470	1.79
4.	Stolon of Taro	27,020	6.7%	35,448	1.31
5.	Taro tuber	26,540	6.5%	34,825	1.31
6.	Egg plant	24,800	6.1%	32,740	1.32
7.	Snake Gourd	21,700	5.3%	28,340	1.31
8.	Yard Long Beans	18,550	4.6%	25,660	1.38
9.	Bottle Gourd	18,000	4.4%	23,615	1.31
10.	Green Papaya	15,280	3.8%	20,097	1.32
11.	Others	96,770	23.8%	141,922	
Total of Survey		406,170		565,398	1.39

- 10 Major Items of Vegetables/Fruits Exported to the Middle East in 1996-97

Ranking	Name of Crop	Volume		Value US\$	Avg. Price US\$/Kg
		'000' Kg	%		
1.	Bitter Gourd	2,086	16.6%	2,514	1.20
2.	Yard Long Beans	1,827	14.5%	2,205	1.21
3.	Green Chilly	1,135	9.0%	1,357	1.20
4.	Potato	1,084	8.6%	1,306	1.21
5.	Snake Gourd	795	6.3%	956	1.20
6.	Stolon of Taro	658	5.2%	793	1.20
7.	Pointed	600	4.8%	721	1.20
8.	Gourd/Paleval	505	4.0%	607	1.20
9.	White/Wax	438	3.5%	726	1.66
10.	Gourd	418	3.3%	503	1.20
11.	Spiny Gourd	3,048	24.2%	3,931	
Total of Survey		12,597		15,620	1.24

- Total number of vegetables and fruits under export are about 90.

Market characteristics

- Operating mainly in ethnic markets with little quality differentiation, specialization and improvement
- Hardly any direct linkage between exporters and producers
- Poor packaging and post-harvest handling
- Almost absence of cool chain management
- Acute shortage of air cargo space
- Winter in UK and Summer in ME provide market Niches for seasonal produces

EXPORT OF FLOWERS

- Still at nascent stage, no regular export
- Trial shipment of tuberose made in the past, but could not be followed up mainly because of shipment problems
- Orchid development taking place and sample shipment made with good market response
- Shipment problem remains

ENVIRONMENTAL AND HEALTH REQUIREMENTS IN KEY EXPORT MARKETS

UK

- Plant Health Requirements: Phyto-sanitary Certificate
- Standards and Regulations: Conformity Certificate
- Fruit Safety: Mainly from processed food
- Environmental and Social Issues: EUREP-GAP, etc.



ME Countries

- **Plant health certificate (Phyto-sanitary certificate): a mandatory requirement**
- **General requirement also calls for maintaining allowable tolerance level and using good package**
- **But these are not strictly enforced**
- **No immediate threat for stringent standards like that of EUREP-GAP**

AWARENESS OF QUALITY & ENVIRONMENTAL ISSUES

Organization of Export

- Vegetables and fruits are mostly exported by members of BFVAPEA, around 90% of total export
- Most of the exporters belong to SMEs and they normally export to friends and relations known as ethnic market
- Ethnic market buyers are less quality conscious and less demanding
- Hence exporters also remain satisfied with traditional way of collecting produce for export through middlemen
- This leads to enormous post-harvest loss, sometimes more than 30%
- Exporter's awareness about health and safety standards is moderate, but they normally do not bother for implementation, as market does not insist
- They even cannot fulfill the export orders in present condition, because of acute shortage of air cargo space
- Recently, however, some of the buyers have started asking for quality improvement and better packaging



Organization of Production

- Horticultural crops are mostly produced by outgrowers, having little or no direct linkage with exporters
- Most of the outgrowers are small and marginal farmers with low literacy rate
- According to 1996 census, total number of farms were more than 11.8 million, 50% of which were less than of 1 acre and 80% were less than of 2.5 acres of land (2.47 acres = 1 ha)
- The situation is likely to be more skewed today towards smaller farms
- Awareness of small outgrowers about sophisticated quality requirements of the mainstream export market is practically non-existent

Initiating the Change

- Hortex Foundation first started working in quality development for export
- They organized market-oriented production through contract farming system involving BRAC and some private sector farms
- Extensive training and supports were provided to contract farmers, packhouse operators and technical staff of BRAC and other export houses under MOU with Hortex
- All these were done after the mainstream market outlets were identified and contacted

Exporting Quality Produce

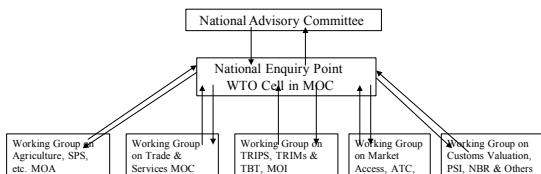
- BRAC was thus involved in export of quality produces
- Initially they were not conceived of as exporter, but eventually they had to be introduced to the export contacts, as private sector declined to export to new contacts on consignment basis
- Today BRAC has emerged as the only organization capable of supplying EUREP-GAP compliant crops
- With only 1 crop and 4 markets they started in 1997-98. Today they have diversified into more than 20 crops and 15 market outlets in various destinations
- Their contribution to total horticulture export is about 10% now

Development of Supermarket

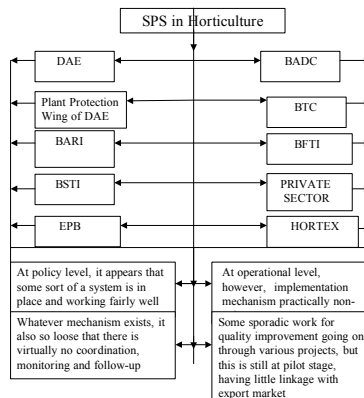
- Supermarket is a recent addition in domestic retail sector in Bangladesh
- This started appearing less than 5 years ago
- Today there are 30 supermarket stores operating in the country as a whole, of which 22 are located in Dhaka
- The coverage, however, is still very low, not even 1% of the retail horticultural business
- Yet they have started creating an impact on quality production and marketing of horticultural crops
- IPM farming, organic farming, eco-friendly farming, etc. are getting increasingly popular, although compared to total production, the coverage is very negligible

EXISTING MECHANISM FOR INFORMATION GATHERING, PROCESSING AND DISSEMINATION

National Enquiry Point



Working Group on Agriculture and Other Related Matters



CURRENT ADJUSTMENT APPROACH

At Policy Level

- Concerned Ministry is responsible to view WTO web site regularly and analyze changes taking place to initiate policy adjustment
- Their responsibility also includes sending notifications to WTO with regard to policy changes within the country
- For SPS and other related matters, MOA is the National Notification Point
- So far as sending notification is concerned, this has more or less been systematized
- But for impact analysis of external changes, the system does not seem to be working at all
- No national/sub-regional/regional early warning system seems to be in operation

At Field Level

- Little orientation and little concerns are observed
- Exporters are still following *market to market approach* as opposed to *production to market approach*
- As a result, little production level adjustment is taking place in the way expected
- Some project based work on IPM/organic farming, etc. going on, but its coverage is so limited that it cannot leave a perceptible impact on export and it is not certified as such

**ELEMENTS OF PROACTIVE APPROACH
NATIONAL ADJUSTMENT POLICY**

Strategic Response to Standards in Trade			
Approach	Reactive		Proactive
<i>Exit</i>	Wait for standards and give up		Anticipate standards and leave market
<i>Loyalty</i>	Wait for standards then comply		Anticipate standards and comply ahead
<i>Voice</i>	Complain when standards are applied		Negotiate before standards are applied



- At policy level, government machinery claims to have followed proactive approach
- But the claim cannot be substantiated in the absence of appropriate coordination, monitoring and follow-up throughout the supply chain at operational level
- Case in example is shrimp industry

Problem at Operational Level

- Lack of infrastructural facility
- Lack of access to information
- Lack of coordination and monitoring system
- Limited technology choices
- Inadequate access to environment-friendly raw materials
- High compliance cost, particularly for SMEs
- Lack of knowledge and skill
- Vulnerability to market access barriers
- Diseconomies of scale of operation
- Difficulties in harmonizing
- Organizational problems of SMEs

Supply Chain Management

- Ethnic market operators not yet tuned to the market need
- Modern marketing/mainstream markets are increasingly demanding compliance with stringent environmental and health measures by suppliers
- These contradictions affect supply chain management
- Voluntary standards like EUREP-GAP also creates a bias towards large farms to the disadvantage of small farms
- Supply chain management thus barely responds to the need of the day, although the market offers opportunities for private sector cooperation

Impact Assessment and Cost of Compliance Analysis

- For setting up the adjustment strategy, impact assessment and cost of compliance analysis need to be undertaken
- If the benefit of adjustment is more than the cost involved, the adjustment will then be justified; otherwise not

National Standard Setting, Implementation of Foreign Standards and Compliance Assessment Procedure

- BSTI is the national institution responsible
- So far 17,000 national standards, including over 300 for food and horticultural products are formulated
- BSTI also adapted ISO 9000, ISO 14000 and HACCP as Bangladesh standards
- Yet harmonizing with international standards is relatively slow and BSTI's monitoring system is also weak
- So far compliance procedures are concerned, particularly in horticulture sector, it is the responsibility of Plant Protection Wing of DAE
- This wing of DAE is also the custodian of the IPPC and APPC
- Yet, it neither has adequate laboratory facilities for residue testing, nor does it go in such depth, while issuing phyto-sanitary certificates

Pre-standard Setting Consultation in Export Markets and participation in International Standard Setting Meeting

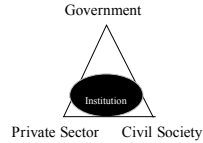
- This is carried out as a routine work without putting in serious home work
- It is important to see that consultation meetings are represented by technical people who are experienced and knowledgeable in the matter

CAPACITY BUILDING

- Total Approach needed to build up:
 - Awareness and recognition
 - Physical infrastructure
 - Human resources/ training
 - Institutional build-up



- Institutional build up again should cover:



- Capacity building has to be sustainable to help build up a system that works in a coordinated way
- For this, Technical Assistance needed, not in a piecemeal way, but in a comprehensive, coordinated and systematic way

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

- Although not yet a major supply source, Bangladesh seems to have high export potential for horticulture
- Present intake of top 7 markets (95%) is nowhere near the total market requirement, not even 1% of the demand of UK market alone
- Market *Niches* in Europe in Winter and in Middle East in Summer holds a good prospect for export expansion in these markets
- Although present market outlets are following liberal policies for import of Asian vegetables and fruits, this may not continue long
- There is, therefore, an urgent need to look seriously to market compliant production and supply management
- For this, comprehensive and multi-facet capacity building and development support is needed, as discussed

Recommendation

To ensure supply of **Clean and Safe Food** from **Farm to Table** as per mainstream market demand for enhancing market access and export competitiveness, the following recommendations are made:

- Impact assessment study
- Cost of compliance study
- Awareness and recognition
- Physical infrastructure
- Human resources/training
- Institutional capacity build-up
- Donor assistance

