

Environmental Concerns, Market Access and Export Competitiveness of Philippine Fresh **MANGOES**

OVERVIEW

- Backgrounder
- The Philippine Mango Industry Profile
- Environmental Concerns in the Mango Industry
- Comparison with Fresh Okra Industry
- Immediate Action Points Undertaken
- Proactive Approach and Recommendations

Background

- Global developments in food trade
 - Increased demand for food, increasing awareness for food and environment safety, bio-terrorism, food-borne illnesses, goal for sustainable agriculture



Developed countries impose stricter environmental and health regulations



Developing nations cannot cope

Background

- Developing countries face various problems:
 - Lack of knowledge on Good Agricultural Practices (GAP)
 - No direct linkage between exporters and producers
 - Poor packaging and post-harvesting handling
 - Poor infrastructures and support systems
 - Lack good quality raw materials
 - Lack system of standardization and quality assurance
 - High compliance costs

Background

The Philippine Mango Industry is one of the industries affected by stricter environmental and health regulations imposed last year by one of its major export market, Japan



Philippine Mango Industry Profile

- Philippines rank no. six (6) among the major mango producers in the world
- Mango production is 4% of total world production
- Sunrise industry supports 2.5 million Filipino farmers
- Contributes an average of P12.5 billion per year in GVA

Philippine Mango Industry Profile

Table 1. Total Mango Exports
As of January – September 2004

Export Markets	Total Exports (kgs.)	%
Hongkong	15,851,699.0	62.22
Japan	6,718,643.8	26.37
China	1,594,296.0	6.25
Korea	907,482.5	3.56
Singapore	265,485.0	1.04
U. S. A.	70,666.0	.28
Australia	1,825.0	.007
Other Countries	66,194.5	.26
	25,476,291.8	

Source: Plant Quarantine Service

Philippine Mango Industry Profile

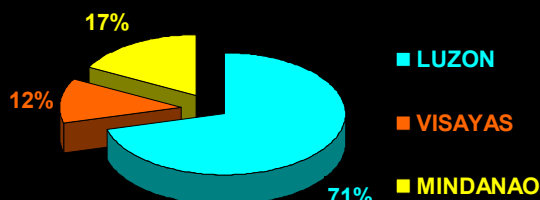
Table 2. Total Mango Production (2004)

Year	Production (MT)	Area (Ha.)	Yield (MT/Ha.)
2001	881,710	137,050	6.43
2002	956,033	150,505	6.35
2003	1,004,280	155,235	6.47
2004	1,075,250	162,320	6.44
Growth Rate %			
99-03	3.8	4.1	-0.3
03-04	5.0	3.1	-0.1

Source: Bureau of Agricultural Statistics

Philippine Mango Industry Profile

Regional Production - 2003



Source: Bureau of Agricultural Statistics

Philippine Mango Industry Profile

• Types of Grower/Farmers

– About half of the supply are classified as **backyard growers** who owned mango farms with 5 – 20 fruit bearing trees.

– **Commercial growers** (47 percent of the study samples) are usually professionals and entrepreneurs who are based in the urban centers

– Few orchard growers classified as corporations. These **corporate farms** either have integrated production and processing operations, or export their produce to foreign markets through their exclusive marketing arms

Environmental Concerns in the Mango Industry

- Problems:
 - Lack of GAP or updated knowledge on GAP
 - Lack of information dissemination
 - Emergence of environmental and health requirements i.e. Sanitary and Phytosanitary (SPS) gave rise to Technical Barriers to Trade (TBTs) which are impediments to Philippine exports

Environmental Concerns in the Mango Industry

- September 2004, Japan, one of the major Philippine mango export market, lowered the maximum residue level (MRL) of *chlorpyrifos* (toxic substance found in some pesticides) for Philippine fresh mangoes from 0.5 parts per million (ppm) to 0.05ppm
- perceived to be arbitrary as seen in the comparisons of the different MRLs in different crops being imported by Japan

Environmental Concerns in the Mango Industry

- MRL of fruits that are directly consumed without peeling
 - Apple – 1.0ppm
 - Kiwi Fruit – 2.0ppm
 - Cherries – 1.0ppm
 - Grapes – 1.0ppm
- MRL of fruits that are peeled and scooped before eating like mangoes
 - Bananas – 3.0ppm
 - Citrus fruits – 1.0ppm

Source: Japan Ministry of Health, Safety and Labor

Environmental Concerns in the Mango Industry

- Because of this seemingly arbitrary assignment of MRLs for the different fruits, there seems to be a bias against mangoes which can possibly hinder the export growth of the said industry
- Most of mango growers are only through backyard plantation and lack information about GAP. The chemicals that these mango growers use may not be accredited by the exporting countries.

Comparison with the Case of Fresh Okra Industry

- In 2001, fresh okras inspected at the Japanese port, was found out to have *chlorpyrifos* residue of 0.17ppm, which is above the allowable MRL of 0.1ppm.
- The okras were detained for 48 hours in the Japanese port and were subjected to inspections. This weakened the marketability of okras because its shelf-life was reduced.
- Exports of okra drastically declined in the year 2002 from 2,200 metric tons with approximate value of \$6.0Mn down to 400 metric tons with reduced value of about \$1.0Mn.

Comparison with the Case of Fresh Okra Industry

• Response of Okra Industry

- mandatory accreditation of the farms and packaging stations of all exporters and growers
- BPI also assigned code for each farmer which is reflected in the final cartons for export, this is now the traceability code
- BPI Plant Quarantine inspectors were assigned to monitor the proper use of accredited chemicals
- Phytosanitary Certificate is issued to the exporter after inspection in the respective packing houses

Comparison with the Case of Fresh Okra Industry

The Philippine mango industry experienced the exact situation of the fresh okra industry in the sense that strict health requirements have hampered the export growth of the product, thus, a need to counter the issue as soon as possible.

Immediate Action Points Undertaken

- Immediate implementation of the chemical residue analysis report and issuance of certificate of compliance to MRL by the BPI thru the NPAL (National Pesticide Analytical Laboratory)
- Ensure adherence to GAP and regulated use or complete banning of Chlorpyrifos containing pesticides by the 2.5 million mango farmers nationwide
- Provide impactful mango promotional support in Japan to assure Japanese consumers that our Philippine mangoes do not have harmful pesticide residues and ensure continued export volume growth in Japan

Figure 2. FRESH MANGO PROCESS FLOW



Proactive Approach and Recommendations

- The government and the private sectors should collaborate to address this environmental concern.
- The arbitrariness of the MRL set for mangoes seems to be discriminatory especially to small growers and producers which should be addressed immediately.
- The industry is now voicing out their appeal to have the MRL retained at the original level of 0.5ppm.

Proactive Approach and Recommendations

- Philippines should also do its part in improving the quality of its products to meet the stricter health and sanitary regulations of its export market

–China Case:

- Chinese horticultural products took advantage of the price and cost in the international market
- implemented strict verifying methods and control measures
- made efforts to accelerate the development of organic food and expanded production of organic food
- set up test centers with high-technology equipments to monitor quality from the raw materials to the finished products
- enterprises acquired environmental protection certification

Proactive Approach and Recommendations

- Need to tap line agencies involved in agricultural practices such as Department of Agriculture (DA), Department of Science and Technology (DOST), and Department of Environment and Natural Resources (DENR) to help out in dissemination of information regarding GAP to the small farmers and growers nationwide
- Need to review other existing conditions of the traditional agricultural practice
- Adopt some of the doable measures done by the fresh okra industry

Proactive Approach and Recommendations

- Need for technology advancement is also necessary to equip the country with the necessary measures to assure environment protection and safety
- Government should increase funds for research and development studies, trainings and seminars in order to continuously renovate techniques and not be left behind to new developments

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Market Access and
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THANK YOU!