

# Regulatory Procedure

## EXPORT OF HORTICULTURE FROM PAKISTAN



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### Ministry of Industries & Production

### Government of Pakistan

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# **INTRODUCTION OF SMEDA**

The Small and Medium Enterprises Development Authority (SMEDA) was established with the objective to provide fresh impetus to the economy through the launch of an aggressive SME development strategy.

Since its inception in October 1998, SMEDA had adopted a sectoral SME development approach. A few priority sectors were selected on the criterion of SME presence. In depth research was conducted and comprehensive development plans were formulated after identification of impediments and retardants. The all-encompassing sectoral development strategy involved overhauling of the regulatory environment by taking into consideration other important aspects including finance, marketing, technology and human resource development.

SMEDA has so far successfully formulated strategies for sectors, including fruits and vegetables, marble and granite, gems and jewellery, marine fisheries, leather and footwear, textiles, surgical instruments, transport and dairy. Whereas the task of SME development at a broader scale still requires more coverage and enhanced reach in terms of SMEDA's areas of operation.

Along with the sectoral focus a broad spectrum of services are now being offered to the SMEs by SMEDA, which are driven by factors like enhanced interaction amongst the stakeholders, need based sectoral research, over the counter support systems, exclusive business development facilities, training and development, legal and other services for SMEs and information dissemination through wide range of publications.

## **ROLE OF LEGAL SERVICES CELL**

The Legal Services Cell [LSC] is a part of Business Development Division of SMEDA and plays a key role in providing an overall facilitation and support to SMEs. The LSC provides guidance based on field realities pertaining to SMEs in Pakistan and other parts of the world.

LSC believes that information dissemination among the SMEs on the existing regulatory environment is of paramount importance and it can play a pivotal role in their sustainable development.

In order to facilitate SMEs at the Micro Level LSC has developed user-friendly systems, which provide them detail description of the Laws, and Regulations including the process and steps required for compliance.

The purpose of this document is to provide SMEs with information pertaining to a income tax practices for SMEs. Companies interested in enhancing their understanding about the procedures can also use the document

## List of abbreviations used in the document

<b>S.No</b>	<b>Abbreviation</b>	<b>Word</b>
1	BCA	Bank Credit Advice
2	BRC	British Retailer's Consortium.
3	CFCs	Common Facility Centers.
4	CIF	Cost, Insurance and Freight
5	EDF	Export Development Fund
6	EXIM	Indian Export Import Regulations
7	EIS	Export Information Sheet
8	FAO	Food and Agriculture Organization
9	FY	Financial Year
10	GAP	Good Agricultural Practices
11	GDP	Gross Domestic Product
12	ha	Hectare
13	HACCP	Hazard Analysis and Critical Control Points
14	HRD	Human Resource Development
15	HS	Harmonized Commodity Description and Coding System
16	IAEA	International Atomic Energy Agency
17	LC	Letter of Credit
18	MINFA	The Ministry of Food and Agriculture.
19	MINFAL	Ministry of Food, Agriculture and Livestock
20	MRLs	Monitoring of Maximum Residues Limits
21	NOC	No Objection Certificate
22	PAEC	Pakistan Atomic Energy Commission
23	PHDEC	Pakistan Horticulture Development and Export Company
24	R &D	Research and Development
25	SPS	Sanitary & Phyto-Sanitary
26	SRO	Statutory Rules and Orders
27	WHO	World Health Organization
28	WTO	World Trade Organization

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## **Executive Summary.**

Agriculture sector is the backbone of Pakistan's economy employing 44 % of the work force. Nature has blessed Pakistan with an ideal climate for growing a large variety of vegetables and fruits. Agricultural sector is directly or indirectly contributing 25% towards GDP. Vegetables and fruits are rich source of vitamins, carbohydrates, salts and proteins. With increased health awareness in the general public and changing dietary patterns, vegetables are now becoming an integral part of average household's daily meals. In addition, high population growth rate has also given rise to high demand in basic dietary vegetables. Increased health awareness, high population growth rate, changing dietary patterns of increasingly affluent middle class and availability of packaged vegetables, has therefore generated a year round high demand for vegetables in the country in general and in major city centers in particular. Unfortunately, lack of developed vegetable processing and storage facility robs our farmers from their due share of profit margins from the national and international markets.

Like vegetables fruits are delicious in taste and are abundantly available in their respective ripe seasons. They are also a good natural source of vitamins, proteins and carbohydrates. Fruits like Mango, Guava, Apricot, Strawberry, etc. are processed into pulp, paste, juices, squashes and jam. These products are used as part of food item by the people all over the world. However, our farmers have yet not been able to encash this opportunity and still follow traditional sowing and picking patterns. Additionally they have no information about how to export and where to export; consequently our horticulture produce could not get the maximum benefits of international market.

Export of horticulture means to sell Horticulture in another country. This involves complex procedures, including filing and exchange of documents, both in the country of Export (from where horticulture are to be shipped/dispatched) and in the country of Import (where these horticulture are to be discharged/delivered). The requirement of documentation arises due to the fact that the horticulture that are exported are to be sold to some one who is thousands of miles away, speaking a different language, having different customs, preferences, currency and import regulations. In order to facilitate trade with other countries, certain sets of rules have been developed by the trading nations over the centuries, which are normally followed in foreign trade today. The international horticulture trade is governed by rules made by the World Trade Organization (WTO) , Food & Agriculture Organization of the United Nations and Hazard Analysis and Critical Control Points (HACCP).

Export of Horticultures is allowed to every company, firm and individual who obtains an NOC from Ministry of Food and Agriculture, Government of Pakistan. In first step all Horticultures shall be kept in quarantine for such period & manners as the Quarantine Officer may determined for carrying out tests, examination before their transportation for export. All Horticultures under quarantine are subjected to the quarantine fees. The fee for Quarantine and issuance of health certificate is different for different varieties that is published in official gazette.

This document is an attempt to provide basic information about export of horticulture from Pakistan. This will help the farmers and traders to explore the international market thus maximizing their income.

## **1 - Introduction**

The importance of horticultural crops in human nutrition is well known. These crops play an important role in balancing the diet of human being by providing not only energy-rich food but also promise supply of vital protective nutrients like minerals and vitamins do. They not only adorn the table but also enrich health from the most nutritive menu and tone up energy and vigor of the people. These crops provide supplementary and protective food. The consumption of these horticultural crops will contribute in alleviating malnutrition and other under nutritional problems like night blindness, anemia, goiter, scabies etc. of the poverty stricken people of the society.

The strategic location of the country and potential of horticulture sector creates a good export avenue for our horticulture and horticulture products. The consumption of horticulture in the world is on the continuous rise for past two decades, the two most important factors for this increase in consumption are the growth in population, urbanization and increasing income of people. This has led to include a variety of horticultures, in people diets. This increased consumption has created an incentive for the poor farmers to increase horticulture production thus creating an additional source of income. Moreover, horticulture plays very important role in covering the dietary deficiency for the farmers and human population.

It is assumed that the demand for food from horticulture will continue to rise, so there is a need on the part of the government & representative trade bodies to assist, facilitate and guide the potential exporters of horticulture to earn for our beloved country. Primary focus should be on improvement of horticulture production on sustainable basis which depends upon the general agriculture practices and pest/diseases control. In addition the institutions and human recourse capacities also have to be strengthened.

As far as export of horticultures is concerned all the horticultures are kept under quarantine for the required period and after necessary tests are allowed for export. There is a great demand for the export of horticultures from Pakistan to Middle East countries and Afghanistan also but it is subjected to government policy for export of Horticultures which off and on banned by the government.

Following are the major Opportunities and threats related to horticulture sector.

### **Opportunities**

1. Swift increase in consumption/demand of horticulture; in land and abroad.
2. Technological improvement in horticulture production and processing in developed countries which can be replicated in our beloved home land.

### **Threats**

1. Rise in the use of pesticides for horticulture hence increasing the cost of cereals for human consumption
2. The continuous drought in the past decade and increasing demand of horticulture

## 2 - Horticulture Sector in Pakistan

The region of Pakistan has a rich topographic and climatic endowments and variations in soil, on which a large range of horticultural crops, such as fruits, vegetables, roots and tuber crops, ornamental, medicinal and aromatic plants, plantation crops, spices and other are grown.

Since independence in 1947, the major emphasis was laid on achieving self-sufficiency in food production. Development of high yielding wheat varieties and high production technologies and their adoption in areas of assured irrigation paved the way towards food security ushering in green revolution in the sixties. It, however, gradually became clear that horticultural crops for which the Pakistani topography and agro climates are well suited is an ideal method of achieving sustainability of small holdings, increasing employment, improving environment, providing an enormous export potential and above all achieving nutritional security.

Production and marketing of fruits, vegetables, floral crops and landscape plants is called horticulture industry. Horticulture plants requires tropical to temperate climatic conditions and Pakistan is blessed with wide range of agro-climatic conditions i.e. tropical, sub-tropical, warm temperate and temperate regions. This opportunity positions Pakistan in privileged countries, where variety of crops particularly horticultural crops can be produced having enormous potential in the global market.

A significant increase has been observed in the export earnings from the horticultural crops during the recent years. This sector has the potential to provide opportunities to increase income and alleviation of hunger and poverty and curve down socio-economic problems of the region.

Total cropped area is about 22.2 million hectare out of which 4.5 million hectare is under fruit /vegetable cultivation<sup>1</sup>. The area under fruit increased by 22.7% and fruit production increased by 21.1% due to good economic returns received by the growers. The area under fruit cultivation, during 2005-06, was 0.8 million hectares. (MINFAL, 2006) <sup>2</sup> Pakistan is a major producer of fruit and vegetables, with most of the production consumed in the domestic market. The fruits and vegetable production area has increased rapidly in recent years, due to local consumption and export potential.<sup>3</sup>

Production of peach, apples, dates, grapes, persimmon, pomegranate, reflecting the strong domestic market demand for horticulture crops. Citrus fruits, primarily the mandarin variety Kino, is the largest fruit crop group by volume and is a major export revenue earner. Pakistan is the fifth largest producer of dates. Though the mangoes production is in millions of tons annually, but only small friction of the same is exported annually.

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1 Fertilizer use by crop in Pakistan <http://www.fao.org/docrep/007/v5460e/v5460e0a.htm>

2 [http://pakjas.com.pk/upload/82817\\_-.pdf](http://pakjas.com.pk/upload/82817_-.pdf)

3 Surge in fruit and vegetable exports, By By Rauf Nizamani DAWN Monday, 22 Feb, 2010

In Khyber Pashtoonkhawa and Northern Areas there is great room and scope for promotion of citrus fruits, peaches, plums, apricot, persimmon, apple, strawberry, guava etc. In Punjab citrus (Kino, oranges, etc), mango, guava, while in Sind mango, banana, dates and papaya and in Baluchistan apple, grapes, dates, stone fruits (apricot, peach, plum, cherry, etc) and pistachio can be targeted for international marketing by promoting processing industry for value addition and export. There is considerable scope for introduction and development of new fruits like cherries, strawberry, litchi in different parts of the country. There is tremendous potential for production and processing of tomatoes, potatoes, onions etc.

The government is paying special attention to promote this industry, for this purpose Pakistan Horticulture Development and Export Company have been created aiming at to encourage and facilitate the growers to “grow for export; impart new technologies and techniques to growers and processors; develop/ implement export marketing strategies; create an export oriented environment facilitated through producers and quality standard through regulations and incentive schemes; attract local and foreign investment; facilitate in setting up of necessary material and quality infrastructure including inter alia cool chain system all over the country, develop linkages and networking with relevant institutions i.e. R &D, banks, training/ HRD, joint venture arrangement/ commercial linkages with international companies, technology transfer, and sub- contracting. There is a large potential for value added of horticultural crops and products, which can bring many fold foreign exchange compared to what we are getting at the moment. This can be achieved through good farm management, adopting good agricultural practices, promotion of products and byproduct industry through value addition, processing, improved picking, grading, modern packaging, marketing practices and export.

However, the country has not yet been able to achieve quality standards and marketing potential. There are issues relating to compliance, certification according to international standards, traceability, farm management; perish ability, cool chain, storage, wholesales markets and marketing etc. Banks credit to this sector is only 4-5%. The disbursement to horticulture was only around Rs 6.5 billion in 2008-09 against total disbursement of Rs 169 billion during the period. One of the main reasons for low disbursement to horticulture sector is lack of awareness of banks regarding the sector. Therefore, in order to facilitate the banks, the guidelines for financing have been developed by State Bank of Pakistan in collaboration with banks, MINFAL, PHDEC; hortibusiness finance sub-committee, farmer’s representatives and other stakeholders. Banks can benefit from the guidelines to tap the sector that promises high returns to the horticulturist, banks and the economy as a whole.

### **Hortibusiness**

The business of fruits, vegetables, flowers and condiments from sowing through cultivation and food processing till export is termed as agribusiness. The business can be broadly divided into two main categories viz. horticulture crops (pre harvest) and value addition and processing (post harvest).

## **Horticultural Crops**

The pre harvest horti-business is termed as horticulture which is one of the most important branches of agriculture. Horticulture deals with fruits, vegetables including condiments, flowers and ornamental shrubs and trees. Horticulture crop often have high cash value and are intensively cultivated on relatively small area. The high cost value of the horticulture crops justifies a large input of capital, labour and technology. There are four main branches of horticulture.

### **i. Pomology or fruit production**

Pakistan is one of the few countries of the world having four seasons and the soil is rich for all kinds of fruits. More than 28 types of fruits are grown throughout the year. The country has also got the position both geographically and strategically to enhance its fresh fruit produce exports to our traditional markets like Middle East, Afghanistan, Iran, and the emerging markets like China, Central Asian Republics along with the highly competitive but lucrative markets of Europe and Far East. The prominent fruit crops are mangoes, citrus (kino, oranges, etc), dates, banana and apples having vast local consumption as well as exports.

### **ii. Olericulture or vegetable production**

Pakistan also produces more than 30 types of vegetables. The sector has immense potential both for local consumption as well as exports. The tunnel farming has also provided a boost for the production of off season vegetables which is one of the most profitable avenues for farmers. The government is emphasizing for the development of potato and onion production on commercial basis as it has a potential for processing and exports in addition to local consumption.

### **iii. Floriculture or flower production**

In Pakistan floriculture is a relatively new but a fast growing sub sector of horticulture. Traditionally rose petals, jasmine, tulips and marigolds have been produced for garlands, worn on festivals and ceremonial occasions. Local growers export to the Middle East and on selected cases, to meet European demand of red roses on Valentine day. The mountain valleys of North Western Frontier and Balochistan provinces offer potential to produce off season and temperate region flowers, bulbs, corms and ornamental plants. Recently new varieties of flowers have been introduced & cultivated that include gladiolus, statice, tube roses and carnations. Earnings from these flowers are comparatively high as compared to the traditional flowers.

### **iv. Ornamental horticulture or use of plants for ornamented purposes.**

The production, marketing and maintenance of landscape plants are classified under ornamental horticulture. The sector is in infancy stage in Pakistan under the government's pilot projects. However, it is also one of the potential areas of horticulture as the profits are very high having large export market in USA, Europe and Japan.

## Post-Harvest Horti-business

Horticulture commodities are highly perishable. Due to unscientific traditional handling post harvest losses are estimated to the tune of 25% to 40% which is disincentive to horticulture expansion. These losses are mainly due to use of traditional techniques of plucking fruits & vegetables and their transportation/ storage. There is a need to have post harvest processing, storage, grading, polishing, packing and other activities in addition to development of cool chain.

### 2.1 MAJOR ACHIEVEMENTS:

The world horticulture market is valued at \$80 billion to which Pakistan contributes an annual \$150 million. Only about 16% of fruits are being processed, although, this activity offers great opportunities to augment volume of value added products using modern technology. The fruits and vegetables exported in fresh form attract discount prices because exporters are unable to provide adequate grading and packing. Pakistan's horticulture export industry's share in the world market has risen steadily from about 5% in 1991 to 12% (value 2004). The potential markets for the Pakistani exporters have been identified in Europe and the Middle East<sup>4</sup>. In the year 1990-91 the total export of fruit was 112000 tonnes, valuing Rs. 935 million rupees which increased to 414000 tonnes with export value of Rs. 9012 millions.<sup>5</sup> The total quantity of exported fruit increased more than three times from 1992-2007, while the total value increased more than nine times. The details are provided in the following table :

#### PRODUCTION AND EXPORT OF FRUIT

Fiscal Year	Production of Important Fruit (000 tonnes)								Export	
	Citrus	Mango	Apple	Banana	Apricot	Almonds	Grapes	Guava	(000 tonnes)	Value (Mln. Rs)
1990-91	1,609	776	243	202	81	32	33	355	112	935
1991-92	1,630	787	295	44	109	38	36	373	125	966
1992-93	1,665	794	339	52	122	40	38	384	121	1,179
1993-94	1,849	839	442	53	153	45	40	402	127	1,324
1994-95	1,933	884	533	80	178	49	43	420	139	1,256
1995-96	1,960	908	554	82	191	49	72	442	135	1,487
1996-97	2,003	915	568	83	188	49	74	448	219	2,776
1997-98	2,037	917	573	94	189	49	74	455	202	2,793
1998-99	1,861	916	589	95	191	50	76	468	181	2,773
1999-00	1,943	938	377	125	120	32	40	494	240	4,130
2000-01	1,865	990	439	139	126	33	51	526	260	4,586
2001-02	1,830	1,037	367	150	125	26	53	538	290	5,097
2002-03	1,702	1,035	315	143	130	24	52	532	263	4,861
2003-04	1,760	1,056	334	175	211	24	51	550	354	5,912
2004-05	1,843	1,671	352	158	205	23	49	572	281	5,408
2005-06	2,458	1,754	351	164	197	23	49	552	455	7,508
2006-07	1,472	1,719	348	150	177	23	47	555	343	6,894
2007-08	2,294	1,754	442	156	240	27	75	539	414	9,012
2008-09 P	2,299	1,732	442	157	326	31	122	490	367	9,783

P: Provisional (Jul-Mar)

Source: Ministry of Food and Agriculture  
Federal Bureau of Statistics

<sup>4</sup> The Competitiveness Support Fund (CSF) <http://www.competitiveness.org.pk/index.php>

<sup>5</sup> Economic Survey of Pakistan 2008-09

Fruit crops: Pakistan is blessed with many horticultural crops, which are highly important in the economy of Pakistan. They include fruits, vegetables, flowers and ornamental plants. The fruit industry in Pakistan has made remarkable progress during the last four decades. The important fruit crops of the country are:

- Citrus - Kinno, Mandarin, Red Blood, Musambi,
- Mango - Langra, Sindhri, Dusehri, Chaunsa, Anwar, Ratol, Begun Pali,
- Grapefruit - Marsh seedless Shambler,
- Lemon ,
- Date palm - Asil, Begum Jungi, Dhaki, Halini Fasli,
- Apples,
- Pomegranate,
- Grapes,
- Guava,
- Apricots,
- Peaches
- Plums,
- Almond,
- Banana;
- Papaya;
- Ber,
- Jamun
- Pear;
- Phalsa,
- Tamarind,
- Groundnut,
- Walnut.

### **3 - SOME POTENTIAL AREAS FOR INVESTMENT**

Following are some potential areas for investment in horticulture Sector

1. Seed Production & Processing Industry
2. Establishment of seed banks
3. Certified Plant Nurseries
4. Green House / tunnel Farming of Cut Roses / off-season vegetables
5. Compartmentalized Cold Storages
6. Dates Processing Industry
7. Fruits / Vegetable Processing and Canning Industry
8. Fresh fruit Processing i.e. grading vexing and packaging for export
9. Essential Oil Extraction Industry
10. Fruit & Vegetable Dehydration Unit
11. Apple treatment plants

### **4 - Quality Control Standards.**

The current state of horticulture – one of the most vibrant sub-sectors of agriculture – generates hopes and fears almost in equal measure. Its exports are going up at a pace of 15 per cent a year for the last five years. But the challenges related to the quality of the produce are also increasing. Experts believe that if the emerging problem is not resolved on priority basis, exports may not move as fast, largely because of international sensitivity to quality issues.

Quality-conscious foreign buyers want every exporting country to weave the international standards-systems into its supply chain if it wants to maintain and expand its share in the international market. These quality issues are sanitary and phyto-sanitary (SPS) measures, traceability, residues of agrochemicals, good agricultural practices (GAP), quarantine treatments and safety of food packaging materials.

With the country's niche expanding in the global horticulture market, the foreign buyers want the exporter to deal with quality issues through credible systems, which it had developed, and get certification for the systems, which include the Hazard Analysis and Critical Control Points (HACCP), the GlobalGAP, the British Retailer's Consortium (BRC) and the Monitoring of Maximum Residues Limits (MRLs). Unfortunately, horticultural focus, so far has been riveted to increasing production, not so much on improving quality.

The annual production of the country stands at 16 million tons of fresh produce – 46 per cent fruits and 54 per cent vegetables. Its market value at current price factor is around \$2 billion. But its annual export is only around \$237 million largely because of quality issues. Though exports are expanding at 15 per cent, they are, in no way, a sure bet five years down the line if quality issues are not addressed<sup>6</sup>. Most of the exports are going to lower-end markets, where quality checks are not as strict as in some western countries. But quality issues have

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<sup>6</sup> Quality issue in horticulture export By Ahmad Fraz Khan DAWAN Monday, 23 Nov, 2009

been cropping up even in these markets. The Russian ban on agriculture imports two years ago and the current Iranian threat to kinnow exports can be cited as examples.

The growers can certainly look for foreign investment in value addition, but they should themselves invest & work in areas like implementing GAP at farm level, HACCP at industry level, establishment of processing plants and cold storages, reefers, and common facility centers (CFCs) so that every stakeholder knows that the systems are here to stay and the government is committed to protect and project them on sustained basis.

Exports can be boosted if Pakistan can develop an integrated quality system. The government has chalked out plans to expand its share in new markets like the EU, East Europe, China, Canada, Africa and Australia. But the key remains quality of the produce from the farmer to the consumer.

Following are few guidelines concerning the marketing and commercial quality Control of horticulture :

#### ***4.1 Identification of Produce***

Nearly all the quality standards state the export documents must clearly identify the variety of horticulture and allied information.

#### ***4.2 Provisions Concerning Quality***

The purpose of the standard is to define the quality requirements of horticulture at the export and import control stage, after classification, processing and packaging.

##### **A. Minimum requirements**

In all cases, subject to the special provisions for each case, if any, and the tolerance limits allowed, the fruit shall be:

- Intact, sound and healthy (fruit affected by rotting or spoilage which make it unfit for human consumption shall be excluded);
- Free of damage and/or external deterioration caused by frost, bruising or extensive healed-over cuts etc;
- Clean, practically free of any visible foreign matter, smell or taste;
- Free of all external sources' moisture;
- Free of discoloring other than laid down in these standards.
- Free of disease, fruit flies and other quarantine pests;
- Free of any foreign smell and/or taste.

##### **B. Colouring**

Colouring shall be normal for the varietal type on at least one -third of the surface of the fruit. Furthermore, the degree of coloring shall be such that, following normal development, the fruit reaches its normal varietals colour at the destination point, account being taken of the time of picking, the growing area and duration of transport.

Fruit meeting the necessary conditions of physiological maturity may be “degreened”, if so required, provided that it shall be carried out in accordance with the manner internationally accepted and prescribed by the concerned regulatory agency in the country, and that the natural organoleptic characteristics of the fruit shall not be modified.

### **C. Uniformity in Size**

For all fruits arranged in regular layers or packed otherwise, the difference between the smallest and the largest fruit in the same package shall not exceed the permissible limit of 5 per cent.

#### **4.3 Provisions Concerning Tolerances**

A maximum up to 5% by number of the fruit not satisfying the minimum quality requirements in terms of health, soundness, size and colour shall be allowed

#### **4.4 Provision Concerning Presentation**

##### **A. Uniformity in Produce**

The contents of each package shall contain only the fruit of the specie specified on the package, for instance, kinnow and apple shall be appreciably of the same degree of ripeness and development.

##### **B. Packaging**

The fruit shall be securely packed in hard paper cartons or any other suitable packaging as per requirements of the importers. The packaging shall be standardized at the net filling capacity of 6, 8, 10 & 13 kg. The fruits shall be packed in such a way so as to protect the produce during handling, transportation and storage.

The material used inside the package shall be new, clean and of a quality that shall not cause any external or internal damage to the fruit. The use of materials particularly of paper or stamps bearing trade specification shall be allowed provided that the printing or labeling shall be done with a non-toxic ink or glue.

#### **4.5 Labeling**

The package shall be labeled clearly indicating the country of origin, trade mark where relevant, commodity, specie/variety, weight, count, name and address of the supplier. The supplier shall be encouraged to print the name of the buyer where so demanded by them. Labeling of additional qualifications of the produce such as shelf-life, nutritional value, green/organic produce or accreditation/certification (like HACCP etc) or collective branding shall be encouraged.

Labels shall be printed or stamped in waterproof ink on the outside of the package in legible form and shall be attractive.

## 5 - Plant Protection & Quarantine -- An Overview

The plant protection measures help in increasing per hectare yield by protecting crops from damages of insects, diseases and weeds. Because, without effective protection against the attack of pests and diseases, the beneficial outcome of other inputs may not be realized either. In this connection, the Department of Plant Protection provides facilities, such as, locust survey and control; pest control by air on field crops, quarantine of agricultural commodities, and monitoring of pesticides imports, manufacture, formulation, repacking, advertisement, sale, use and quality.

Plant quarantine is a pest control through exclusion. The foreign pests are disallowed entering through import of plants & plants product and at the same time allowing export of pest free agriculture material in order to bring about safe trade to and check pest sprayed. Plant Quarantine work is done by Plant Quarantine Division in the Department of Plant Protection, which has the legal authority and management responsibility. The organizational arrangements are as per Article IV of the International Plant Protection Convention, 1997. The Head Office is at Karachi and the quarantine stations are located at the seaports, airports, dry ports and, land border points for the convenience of traders. These are modestly staffed and equipped. This department is established to facilitate trade of plants and plant products.

### **Shipment inspection.**

In order to facilitate the quality of pesticides, the Department of Plant Protection has started the Pre- Shipment Inspection of agricultural pesticides. The main objective of Pre- Shipment Inspection is to ensure the quality of pesticides as per provision of Agricultural Pesticides Ordinance 1971. This is for determining the pesticide quality.

## 6 - EXPORT OF HORTICULTURE.

The current state of horticulture – one of the most vibrant sub-sectors of agriculture – generates hopes and fears almost in equal measure. Its exports are going up at a pace of 15 per cent a year for the last five years. But the challenges related to the quality of the produce are also increasing. Experts believe that if the emerging problem is not resolved on priority basis, exports may not move as fast, largely because of international sensitivity to quality issues.

Quality-conscious foreign buyers want every exporting country to weave the international standards-systems into its supply chain if it wants to maintain and expand its share in the international market. These quality issues are sanitary and phyto-sanitary (SPS) measures, traceability, residues of agrochemicals, good agricultural practices (GAP), quarantine treatments and safety of food packaging materials.

With the country's niche expanding in the global horticulture market, the foreign buyers want the exporter to deal with quality issues through credible systems, which it had developed, and get certification for the systems, which include the Hazard Analysis and Critical Control Points (HACCP), the GlobalGAP, the British Retailer's Consortium (BRC) and the Monitoring of Maximum Residues Limits (MRLs). Unfortunately, horticultural focus, so far has been riveted to increasing production, not so much on improving quality. The annual production of the country stands at 16 million tons of fresh produce – 46 per cent fruits and 54 per cent vegetables.<sup>7</sup> Its market value at current price factor is around \$2 billion. But its annual export is only around \$237 million largely because of quality issues. Though exports are expanding at 15 per cent, they are, in no way, a sure bet five years down the line if quality issues are not addressed.

Most of the exports are going to lower-end markets, where quality checks are not as strict as in some western countries. But quality issues have been cropping up even in these markets. The Russian ban on agriculture imports two years ago and the current Iranian threat to kinnow exports can be cited as examples.

Exports can be boosted if Pakistan can develop an integrated quality system. The government has chalked out plans to expand its share in new markets like the EU, East Europe, China, Canada, Africa and Australia. But the key remains quality of the produce from the farmer to the consumer. For improving export quality, experts believe, the process should start by setting quality benchmarks in the domestic market. Pakistan Horticulture Development and Export Company (PHDEC) have developed such standards for different produces, like mango and kinnow, but they await implementation. They need to be implemented strictly. The company should also be made to develop such standards for other produces as well so that erratic domestic market stabilizes on quality issues, and serves as a launching pad for the increasing exports.

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<sup>7</sup> Quality issue in horticulture export By Ahmad Fraz Khan Daily DAWAN Monday, 23 Nov, 2009

The ministry of food and agriculture (MINFA) and the PHDEC have undertaken Rs500 million project – PakGAP (equivalent to GlobalGAP) – for developing and implementing local quality standards. One hopes that the government does not lose steam mid-way, and the project ensures some kind of quality in domestic market.

Once these systems are in place, the government and its relevant agencies should go whole hog for international certifications (GAP, BRC and HACCP) – demonstrating country’s commitment to produce quality food. The last year’s Trade Policy had given some incentives for such certifications. Along with government, there is a host of other organizations (foreign-funded projects) that are offering fiscal and technical help for such certifications. But, the process has been slow. The government needs to quicken it.

Another area, which merits government’s attention, is developing and implementing these standards through time-bound projects. The foreign-funded projects have not been able to make any mark because their vision, scope and commitment are limited. National stakes are too high to leave the export quality matter to non-governmental institutions. These institutions also do not give confidence to stakeholders because of their limited approach and timeframe. Unless the government shows a deep and long-term commitment to developing standards and converting them into a national initiative, such efforts will not produce any difference. The PakGAP is the first serious attempt to turn the domestic market quality conscious. It should be followed by more quality-specific project for each crop if the country has to claim some share in the global horticulture market.

The government can certainly look for foreign investment in value addition, but it must itself invest in areas like implementing GAP at farm level, HACCP at industry level, establishment of processing plants and cold storages, reefers, and common facility centers (CFCs) so that every stakeholder knows that the systems are here to stay and the government is committed to protect and project them on sustained basis.

Export of horticulture means to sell Horticulture in another country. This involves complex procedures, including filing and exchange of documents, both in the country of Export (from where horticulture are to be shipped/dispatched) and in the country of Import (where these horticulture are to be discharged/delivered). The requirement of documentation arises due to the fact that the horticulture that are exported are to be sold to some one who is thousands of miles away, speaking a different language, having different customs, preferences, currency and import regulations. In order to facilitate trade with other countries, certain sets of rules have been developed by the trading nations over the centuries, which are normally followed in foreign trade today. The international horticulture Trade is governed by rules made by the World Trade Organization (WTO) and Food & Agriculture Organization of the United Nations.

Export of Horticultures is allowed to every company, firm and individual who obtains an NOC from Ministry of Food and Agriculture, Government of Pakistan. In first step all Horticultures shall be kept in quarantine for such period & manners as the Quarantine Officer may determined for carrying out tests, examination before their transportation for export. All Horticultures under quarantine are subjected to the quarantine fees. The fee for Quarantine and issuance of health certificate is different for different varieties that is published in official gazette, from time to time.

## **6.1 Export markets**

Pakistan is geographically located close to the Middle East and South-East Asia. Both of these regions are deficient in Horticulture products and depend upon import from other countries. The Horticulture industry in most of the developed world is highly subsidized. With reduction of subsidies in the wake of WTO, the local Horticulture sector should have better opportunities to compete.

## **6.2 Export Constrains:**

The export of horticulture face many constrained because of the presence of pests, fungi and other micro organism in the harvest. To check the infected harvest the modern world has imposed many restrictions, and through different certifications they have regularized the export of horticulture.

The major reasons for lack of export trade are:

- Absence of Disease Free Zones
- Lack of proper regulatory law / rules
- Non-existence of modern laboratories and value addition
- Quarantine procedures requirement in the importing countries.

## **6.3 Post Harvest Issues**

The overall lack of Food Processing and Post-Harvest Technology in Pakistan is not only responsible for losses in fruit and vegetable products by 30 to 40 percent, it also hampers national efforts to earn more foreign exchange through exports of horticultural products. The main objective of the new technology is to fulfill international quarantine requirements and ensure enhanced shelf life of perishable items. To meet the challenge for Pakistani fresh produce exports, the Export Development Fund (EDF) has approved establishing two irradiation plants in the country, one each at Lahore and Karachi. The plants being established jointly by Pakistan Horticulture Development and Export Company (PHDEC) and Pakistan Atomic Energy Commission (PAEC) will irradiate food items like rice, wheat, cereals, fruits, vegetables and processed food like spices, through gamma ray treatment.

According to food technology experts, the facilities will greatly boost exports besides helping meet the phyto-sanitary requirement of many countries included under the WTO agreement. The second plant would be established later in Karachi. The PAEC will set up and run these plants whereas PHDEC will help in marketing the services of the irradiation plants.

The project will provide commercial fruit and vegetable irradiation services based on Cobalt 60 gamma radiation to kill plant pathogens or at least retard the growth of disease-causing bacteria and parasites in food items. The ultimate aim of irradiation facilities is to increase the storage life of food material in the most economical way, and to fulfil international quarantine requirements such as disinfections and microbial control of horticulture produce. Irradiation technology is widely used abroad in scientific as well as commercial applications in the field of agriculture and animal sciences, pharmaceuticals and medical science. In the

agriculture sector, one of the important applications of radiation technology in the service of mankind is post harvest handling and management of foods.

Food irradiation involves treating certain types of foods with ionizing energy or radiation. The process strengthens food conservation and improves hygiene, kills micro-organisms causing spoilage, enhances shelf life and helps overcome quarantine barriers for exports. Other benefits include inhibition of sprouting in tubers, bulbs and rhizomes, and delay in ripening of fruits. It also facilitates packing, storage, transport and the distribution of food.

Is this technology safe? Three international agencies, World Health Organisation (WHO), Food and Agricultural Organisation (FAO) of the United Nations and the International Atomic Energy Agency (IAEA) have given food irradiation a clean bill of health, by accepting its safety and usefulness. The process is also endorsed by the American Medical Association, Scientific Committee of the European Union and the American Spice Trade Association.

Pakistan is no doubt a somewhat late entrant to this field, but it is never too late. One can hope that the establishment of the irradiation plants at Lahore and Karachi will go a long way in increasing Pakistan's exports in food and vegetables, which are presently meager compared to their real potential.

**Following is the procedure for export:**

## **PROCESS FLOW FOR EXPORTS**

1. REGISTER YOUR BUSINESS NAME (Company Formation) and get NTN, Sales Tax No certificate
2. OPEN A BANK ACCOUNT
3. REGISTER WITH CONCERNED ASSOCIATION/CHAMBER OF COMMERCE
4. SELECT A PRODUCT FOR EXPORT
5. IDENTIFY POTENTIAL MARKET
6. DO SPECIFIC COUNTRY RESEARCH including Size of the Market, Unit price, Import regulations, certifications required, etc
7. QUOTE A PRICE including packing cost, insurance, credit, agent's commission, octroi duties, documentation fee, marking charges, transportation charges, export duties, etc
8. PACKAGING should be strong and as per client's requirements
9. SELECT A MODE OF TRANSPORT keeping in view the perish ability of the product
10. For FINANCING pre-shipment or post-shipment credits are also available
11. INSURANCE to recover cost in case of loss
12. SIGN A CONTRACT with the prospective Buyer including names of exporter/importer, unit price, total quantity, terms of delivery (FOB, C&F etc), currency and terms of payment (Cash Against Documents or through Letter of Credit), mode of shipment, etc
13. Phyto-sanitary inspection certificate (through Plant Quarantine Department.)
14. PREPARE SHIPPING DOCUMENTS
15. SELECT FREIGHT FORWARDER
16. TRANSPORT THE CONSIGNMENT
17. Data to be provided to the bank through which export has been made within 14 days of transaction/exporting of consignment.
18. Form-E (4 Copies) one copy to be retained by Customs Department at the time of export, 2 copies with file to be returned to bank-SBP and one copy for the exporter.

### **6.4 Signing Of a Contract**

When prices are accepted to export / import horticulture then a contract is signed with the firm for supply of horticulture which becomes binding on both the buyer & seller. Contract is a document, which normally contains.

- a. Name of exporter of Horticulture
- b. Name of importer of horticulture
- c. Variety of horticulture
- d. Unit price
- e. Total quantity

- f. **Terms of delivery (FOB, C&F, CIF etc.)\*** Incoterms (**international commercial terms**) deal with the questions related to the delivery of the products from the seller to the buyer. This includes the carriage of products, export and import clearance responsibilities, who pays for what, and who has risk for the condition of the products at different locations within the transport process. Incoterms are always used with a geographical location and do not deal with transfer of title.

When the exporter is making an offer, he quotes the price of his product. If the offer is accepted then a contract is signed between the buyer & the seller. The contract includes terms and conditions under which goods are delivered.

The buyer sitting in the overseas market is normally not interested to receive charge of goods at one's factory site but he may be interested to get charge of goods on FOB basis which means free on Board at airport or seaport. It means that charges of the consignment are fully paid up to that point and the rest of the freight is paid by the buyer. Terms of delivery are not only important for quoting price but it also makes clear as to who is responsible for the goods if anything goes wrong.

- g. **Terms of payment** (There could be basically two arrangements for payment; first being through direct funds transfer without involving any credit facility. This funds transfer could be both before the shipment of goods or after the shipment of goods generally referred as Cash Against Documents (CAD). Second arrangement is through the Letter of Credit (LC). The customer's bank provides a 'letter of credit', which promises to pay the supplier as long as the terms are met. There are two types of LC, LC at sight and LC Deferred payment. The payment may be paid immediately at sight or at a later date).
- h. Mode of shipment (Sea, Air, Road)
- i. Currency in which transaction will be made.
- j. Validity period of a contract & delivery period.
- k. Shipping marks if any.
- l. Arbitration clause.

## 6.5 Required Documents

The following documents are required while undertaking exports from Pakistan:

1. Invoice
2. Form V 19
3. Form V 18
4. E-form (To claim duty drawbacks etc)
5. Packing list ( in case of Horticulture variety /variety of Horticulture )
6. Verified Certificate of Origin
7. Release Order issued by the Plant Quarantine Department.

## 6.6 Post Shipment Documents

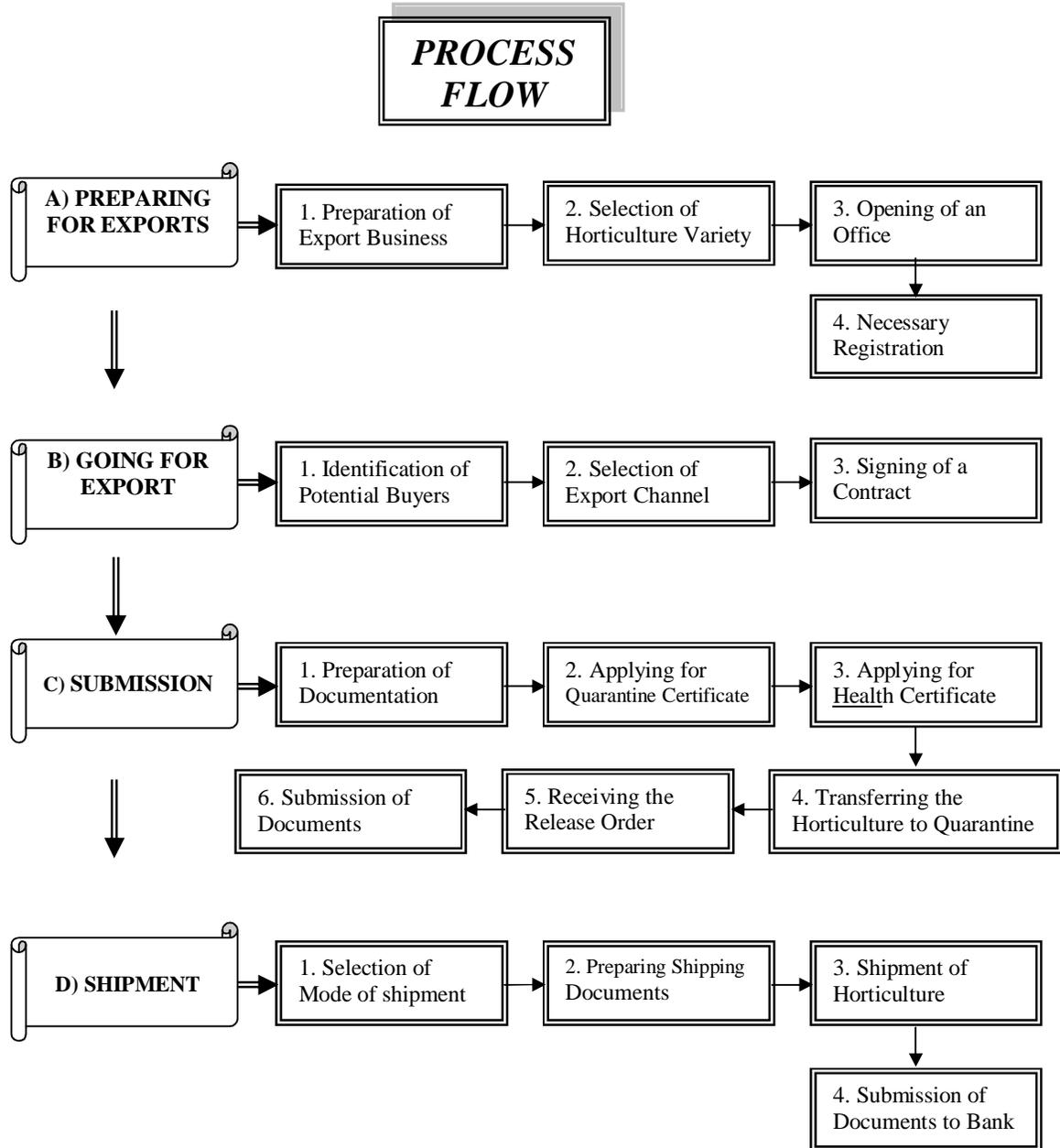
BCA (Bank Credit Advice) to be received from commercial banks after foreign exchange is received. The BCA is considered proof for the purpose of rebates, refinance scheme etc.

## 6.7 How to Claim Duty Drawbacks

Duty Drawback is the most commonly availed incentive by exporters. *It is the amount reimbursed by the government to exporters as compensation for Customs Duty collected at the time of import.* For the purpose, FBR sets aside a certain percentage of customs duty collected on imported raw material for appreciating Horticulture production. The following documents must be in order when Exporter, files the claim for export rebate and submits the file to the customs rebate section

1. Bank Credit Advice ( B.C.A )
2. Bill of Lading (First Original).
3. Transportation Receipt (Attested by the relevant Transport authority ).
4. Customs Signed Invoice with Two Photocopies.
5. Packing list ( in case of Horticulture variety of Horticulture )
6. Exchange Rate Certificate
7. Copy of Shipping Bill.
8. Photo Copy of Form “E”.
9. Laboratory Test Report. *(if required)*
10. Photocopy of SRO. (relevant to exporter’s product)
11. Copy of Cross Border Certificate *(In case of export through land route).*
12. Sales Tax Returns.

## 6.8 Process Flow



## References :

- Pakistan Horticulture Development and Export Company

*<http://www.PHDEC.org.pk/aboutus.php>*

- Department of Plant Protection, Ministry of Food Agriculture & Live Stock, Government of Pakistan

*<http://www.plantprotection.gov.pk/plug.html>*

- Guidelines For Horticulture Financing issued by State Bank of Pakistan ( Agricultural Credit Department ).
- Procedures and Practices in Plant Quarantine, by Dr. Iqbal H. Pahtan Deputy Director (Quarantine) Department of Plant Protection, Karachi.
- Pakistan Research Repository

<http://eprints.hec.gov.pk/view/subjects/a1.3.html>

- List of Certified & Approved Kinnow Processing Units.

<http://www.PHDEC.org.pk/download/certifiedKinnowExportUnits.pdf>

- WTO : <http://www.wto.org/>